

UNIVERSITY OF KWAZULU-NATAL

**DEVELOPING A LEADERSHIP MODEL TO INTEGRATE
MILLENNIALS AND THE FOURTH INDUSTRIAL REVOLUTION IN
THE ETHEKWINI MUNICIPALITY**

By

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DECLARATION

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EDITOR'S CERTIFICATE

I hereby confirm that I have undertaken the language and grammar editing of the dissertation to be submitted in fulfilment of the requirements for the degree of Doctor of Philosophy in Leadership Studies by Carol Nxumalo (student number 205521141) titled Developing a Leadership Model to Effectively Integrate Millennials and the Fourth Industrial Revolution in the Ethekwini Municipality.



CHRISTINE VOSLOO

ABSTRACT

As the generation of the fourth industrial revolution, millennials have been described as the sophisticated generation that relies on the internet for information and finding solutions to resolve workplace problems. While the Ethekewini Municipality employs millennials, it appears from the results of the study that it has not prioritised their integration into the workplace. The fourth industrial revolution is at an advanced stage in developed countries; however, South Africa is still behind on implementation and has not rolled out a plan to integrate it into all government spheres to increase efficiency and enhance service delivery. Consequently, the fusion of millennials and technologies into the workplace may necessitate a shift by government and workplace leaders to ensure that organisations are in sync with the rest of the world.

Against this background, the study is conducted in the Ethekewini Municipality, Durban, South Africa and it seeks to develop a leadership model that can be adopted by the municipality to integrate millennials and the fourth industrial revolution. The study is empirical in nature and was conducted using a mixed methods approach. The data was collected through interviews with fifteen municipal leaders employed at various management levels, a questionnaire was sent to 332 millennials and six millennials participated in the focus group. The study provides recommendations for the municipality to implement the transfortheentic leadership model developed to integrate millennials and the fourth industrial revolution.

Among the key findings of the study is the importance of understanding the relationship between millennials and the fourth industrial revolution, the influence of the revolution on organisational culture, its role in enhancing strategy implementation, its impact on attracting and retaining millennials, and the importance of developing a leadership model to integrate millennials and the revolution to ensure that organisations are prepared for disruptive and advanced technologies such as artificial intelligence, nanotechnology, virtual reality, cloud computing and robotics. Among others, change management is recommended to the Ethekewini Municipality to ensure that all employees share the common goal of integration of millennials and the fourth industrial revolution. Training and development are recommended to ensure that all employees are provided with the necessary skills to drive strategies that will assist the municipality to achieve its goal of building a smart city by 2025. It is also recommended that the municipality develops a vigorous talent management strategy to attract and retain millennials who will be at the forefront of implementation of fourth industrial revolution strategies. A leadership and coaching programme is proposed to ensure that the leaders are well equipped for the 4IR.

Key words: Fourth industrial revolution, millennials, leadership, Ethekewini Municipality.

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CHAPTER ONE: INTRODUCTION

1.1. Introduction

The Ethekwini Municipality employs a large number of millennials across occupational levels. The Municipal Institute of Learning within the Ethekwini Municipality asserted that in 2020, 50% of the workforce will comprise of millennials and by 2025, 75% of the workforce will comprise of millennials who are the future leaders of the municipality (Ethekwini Municipality, 2020). The speakers at a seminar held by the institute in 2018 sensitised the leaders of the municipality on the reality that millennials are not leaders of tomorrow, they are already in the workplace and continue to grow in numbers, and the speakers also encouraged the leaders of the municipality to nurture the skills millennials bring to the organisation through their knowledge of the fourth industrial revolution (Ethekwini Municipality, 2020). The HR Department provided the researcher with an estimate of 5 500 millennials employed at the Ethekwini Municipality in various occupational levels. This thesis examines the key challenges that hinder the integration of millennials and the fourth industrial revolution into the Ethekwini Municipality. It further seeks to develop a leadership model to integrate millennials and the fourth industrial revolution.

The study was conducted in the Ethekwini Municipality which operates within the local government sphere. The Ethekwini Municipality is one of the biggest municipalities, ranking as the third biggest in South Africa following Johannesburg and Cape Town with a workforce of approximately 23 000 employees (Ethekwini Municipality, 2022). The Ethekwini Municipality is located in the KwaZulu-Natal province with a population of 3.9 million. The national government of South Africa in 2019 established a presidential committee that has done extensive research on the fourth industrial revolution and how it can be phased into all spheres of government to create efficiency in delivering services to communities. The presidency created the committee with the purpose of developing a national response plan to deal with the opportunities and challenges of the fourth industrial revolution and to develop strategies needed by the country as a leader in the evolution and development of the fourth industrial revolution. One of the terms of reference of the presidential committee was to develop an integrated national strategy to respond to the emergence of the fourth industrial revolution and to develop new policies to enhance government institutions to ensure competitiveness across economic sectors through cutting edge and innovative technologies (Govender & Reddy, 2019).

The municipality operates within the local government sphere which has not received a clear mandate and adequate support from the national government to address the opportunities and challenges presented by the fourth industrial revolution (Govender & Reddy, 2019). The Ethekwini

Municipality does not have a digital strategy that focuses on the enhancement of service delivery through the opportunities presented by the fourth industrial revolution (Reddy, 2018). A digital strategy refers to the manner in which an organisation applies technological business processes to enhance services and products that distinguish the organisation (Chao, Pai & Xun, 2021). The Ethekwini Municipality has not included a strategy in its integrated development plan to integrate the fourth industrial revolution to ensure that the municipality functions efficiently and in line with the national government's strategy to integrate the opportunities of the fourth industrial revolution. The Ethekwini Municipality has, however, made great strides to utilise the Internet of Things to enhance the services offered by the city such as a mobile app and online services. The Ethekwini Municipality in the 2022/2023 IDP included a proposal that the smart city to be implemented in 2025; however, the city does not have a strategy or plan in place to prepare for the implementation of such a smart city. Research conducted by City Insights indicates that it will take a lot more time for the Ethekwini Municipality to achieve a smart city considering the challenges affecting service delivery, the high level of poverty post the Covid-19 pandemic and the threat of climate change (Cityinsights, 2020).

Research on the fourth industrial revolution, particularly on the implications of the fourth industrial revolution in local government, which includes the Ethekwini Municipality, conducted by City Insights in 2020 found that the revolution will affect service delivery (Cityinsight, 2020). The research by City Insights led by the former City Manager of the Ethekwini Municipality supported the view that municipalities must implement e-government similar to the initiatives implemented by the Ethekwini Municipality to provide online services. The research further recommended the use of e-health care, water and sanitation, and technologies to enhance transportation services to be provided as part of service delivery, which most municipalities are not yet prepared for (Cityinsight, 2020). Organisations in South Africa both in the private and public sector are finding it difficult to adapt to the current technological dynamics presented by the fourth industrial revolution (Jacobs & Pretorius, 2020). In the local government sphere the integration of the fourth industrial revolution will be beneficial to fast-track service delivery (Nalubega & Uwizeyimana, 2019). In its current state the local government sphere is not ready to integrate the fourth industrial revolution, and national government has not presented a practical strategy on the fourth industrial revolution (Erasmus, 2021).

The study aims to assess the readiness of the Ethekwini Municipality to integrate millennials and the fourth industrial revolution and to gauge the impact the fourth industrial revolution has on the attraction and retention of millennials in the workplace. Millennials are the future leaders of organisations, this compels organisations to understand them and their work preferences, which are

highly influenced by the fourth industrial revolution (Rotatori, Lee & Sleeva, 2021). Therefore, organisations such as the Ethekewini Municipality should have a long-term plan that clearly articulates their strategy to integrate millennials and the fourth industrial revolution. The fourth industrial revolution has demonstrated that the future will include advanced technology across industries and government spheres (Bruggemann, 2021). Hence, the Ethekewini Municipality should be transforming the workplace towards the future with a vision that demonstrates how millennials, the generation of the fourth industrial revolution, can be utilised to integrate the fourth industrial revolution into the workplace. The speed of change in organisations as a result of rapid technological advancements is disruptive and has altered the way in which the local government sphere will deliver services to communities (Schiolin, 2020). As a result, organisations will need to employ millennials to keep up with the disruptive changes brought by the fourth industrial revolution (Joyce & Paquin, 2016). Research has found that millennials show an interest in innovative organisations and thrive in a challenging working environment (Wai & Badri, 2020). The fourth industrial revolution will place millennials at the centre of technology in organisations, and this will prompt the older generation in the workplace to adapt to the rapid technological advancements (Marivate, Aghoghovwia, Ismail, Mahomed-Asmail & Steenhuisen, 2021).

The study further explores the role that leaders in the municipality will play in the adoption of the leadership style required to integrate millennials and the fourth industrial revolution into the workplace. The assertion is that millennials display different work preferences to those of the older generation based on their upbringing, especially their exposure to technology at an early stage of their lives. Hence, their approach, attitudes and thinking are different from the older generation. This requires leaders to create a working environment that is accommodative of and conducive for millennials. The ever-changing industrial revolutions have always disrupted the behaviour of humans and the manner in which business is conducted. In the light of the above, it is argued that the leaders of the municipality have a responsibility to ensure that millennials are integrated into the workplace and must develop their capabilities towards the utilisation of the benefits of the fourth industrial revolution. The expertise acquired by millennials through their knowledge of technology can be beneficial to the municipality to achieve the long-term strategic objectives of the organisation and to place it in a better position to identify the critical skills required in the future.

Therefore, it was important to investigate a leadership model which can promote a culture within the Ethekewini Municipality that is inclusive of millennials across departments and occupational levels. In addition, it is imperative to determine the leadership style required to bring about transformation in the municipality and to embrace millennials and the fourth industrial revolution in the workplace. Millennials are the future leaders of the country, and they possess the skills required to prepare the

municipality and the country for the changes and transformation in business processes presented by the fourth industrial revolution (Philbeck & Davis, 2019). Hence, the need for a leadership model that may be adopted by the municipality to ensure that millennials are understood and included in the workplace through the utilisation of the initiatives presented by the fourth industrial revolution. This is an introductory chapter that outlines the rationale/significance of the study and provides an overview of the research problem and research methodology used for data collection.

1.2. Background of the Study

Over the years organisations have experienced an influx of millennials, referred to as the younger generation (generation Y), who have joined workplaces across various occupational levels in different industries (Glazer, Mahoney & Randall, 2019). Millennials are among the four distinct generations comprising the current workforce in most countries (Migliaccio, 2019). During the preliminary engagements pertaining to the study with the Human Resource Department at the Ethekwini Municipality it was revealed that the organisation employs a significant number of millennials across the various occupational levels. Millennials have been described as ‘Gen Y’ or generation Y which refers to individuals born between the 1980s and the early 2000s who are highly influenced by the internet (Caudill, 2020). In addition, millennials have their own work preferences relating to resources such as equipment, organisational structure, technology, attitudes on how business should be conducted. They have different expectations to the older generation pertaining to the culture of the organisations they choose to work for including the leadership styles with which they associate. The older generation is referred to as the baby boomers and includes persons who were born between 1946 and 1964 (Wood, 2019). Baby boomers are known in the workplace for their strong work ethic and are goal oriented (Calk & Patrick, 2017). Millennials have demonstrated in the workplace that they differ from the older generation in several ways, particularly with their exposure to technology at an early stage and their view that technology is an integral part of their lives (Onukwuba, 2020).

The baby boomers are the individuals in leadership positions at the Ethekwini Municipality. Organisations in the public and private sectors must work towards changing and adapting the working environment to include the values and preferences of a multigenerational workforce to ensure that all employees are satisfied and motivated (Watts & Dieffenderfer, 2020). The Ethekwini Municipality does not have a strategy in place in the short or long term to integrate millennials and the fourth industrial revolution based on the current integrated development plan. This is different to the rest of the world where countries such as the United States, the United Kingdom, China and Canada are investing in millennials and placing them at the centre of the fourth industrial revolution (Avis, 2018). Municipalities are among the organisations that are lagging behind in the integration

of millennials into the workplace, thus denying themselves of the meaningful contributions that millennials can make in adapting to the rapid technological advancements that will be used in the future to improve business processes and achieve efficiency (Yap & Zainal, 2020). The Ethekewini Municipality is faced with the challenge of creating an innovative and agile workplace that is driven by the fourth industrial revolution to attract and retain millennials. Leadership plays a pivotal role in ensuring that organisations align to the fourth industrial revolution to remain competitive and profitable and to deliver services (Hernandez, Kenneth, Poole, Mba & Grys, 2021). In the South Africa context, the country is dragging itself into the fourth industrial revolution whilst the rest of the world is already transitioning to the fifth industrial revolution (Hugo & Holm, 2020). It is argued that South Africa is currently not ready as a country, particularly within the three spheres of government, to integrate the fourth industrial revolution and millennials. A change in leadership styles will be required in organisations which wish to compete in the future with the rest of the world (Badibanga & Ohlson, 2021). The transition of the world to the fifth industrial revolution will force most organisations in South Africa, including those in the local government sphere, to adapt swiftly to the fourth industrial revolution (Sarfraz, Sarfraz, Iftikar & Akhund, 2020).

In fact, most African countries are faced with the major challenge of acting swiftly towards integration of the fourth industrial revolution before they can contemplate transitioning to the fifth industrial revolution (Salomon-Fernandez, 2019). The changes presented by the fourth industrial revolution require a different leadership which must act with urgency, tactics, direction and a futuristic vision (Jung, 2020). Millennials require a different leadership approach to be effectively integrated into the workplace based on their personalities, preferences, values and work ethic (Bottomley & Sylvia, 2018). Millennials are known to have a close relationship with technology and will adapt quickly in an organisation that is aligned to the fourth industrial revolution (Purwanti & Romedly, 2019). The Ethekewini Municipality currently uses a transactional leadership style which is stringent on manual processes, policies and procedures, practices that may hinder the integration of millennials and the fourth industrial revolution (Nxumalo & Nxumalo, 2021). Hence, the municipality may require a different leadership approach to integrate millennials and the fourth industrial revolution. Therefore, the study aims to develop a leadership model to effectively integrate millennials and the fourth industrial revolution. The millennials in the municipality are led by the older generation which poses a challenge because of disparities between millennials and their leaders (Nxumalo & Nxumalo, 2021).

Millennials are driven by the fourth industrial revolution whilst the older generation is said to be reactive towards the use of technology in the workplace (Rajhans, Mohammed, Ve & Prabhu, 2021). This has created the perception that older employees do not know much about technology, and

cannot, therefore, relate to millennials and their over-reliance on technology for work and social matters (Falcioni, 2016). Millennials are regarded as the generation that is most misunderstood by leaders in organisations, which creates a disconnection between the two generations (Su & Hahn, 2021). In the light of the above, the fusion of millennials and technologies into the workplace necessitates a shift in approach by government and leaders to ensure that organisations are in line with the ever-changing global and local circumstances fuelled by the fourth industrial revolution (Fomunyam, 2020). There is an acknowledgment that millennials are the future leaders and are key in driving the opportunities presented by the fourth industrial revolution (Hou, 2017). Therefore, the municipality must effectively integrate millennials into the workplace to create a workforce that can tackle the opportunities and challenges presented by the changing world of work influenced by the fourth industrial revolution. There has been a slow shift by the government of the Republic of South Africa towards the utilisation of the initiatives of the fourth industrial revolution to secure a better future for the country (Govender & Reddy, 2019), and the government has acknowledged that South Africa is being left behind in the utilisation of the opportunities presented by the fourth industrial revolution (Webster, 2020). The public sector must drive strategies that will encourage the younger generation to take an interest in working with and for government to create innovative workplaces that aim to propel the country forward (Nelufule, 2021).

Therefore, the emergence of millennials in the organisation requires the municipality to take into consideration that the fourth industrial revolution is key to attracting and retaining millennials as well as enhancing the long-term strategic objectives of the Ethekewini Municipality (Govender & Reddy, 2019). A key challenge to the municipality is its readiness to integrate millennials and the fourth industrial revolution. This necessitates that skills must shift towards advancing technology and artificial intelligence within the organisation (Hugo & Holm, 2020). Among others, the Ethekewini Municipality must adopt a leadership style that effectively integrates millennials and the fourth industrial revolution. Millennials have been labelled by leaders and older employees as different to the older generation (Trent, 2019). Leaders and older employees categorise millennials as a generation lacking in experience that has difficulty controlling their attitudes and preferences in the workplace and their receptiveness to being led by others (McClain, Palokas, Christian & Arnold, 2021). The study investigated the views of leaders and millennials to determine whether a disconnection exists between millennials and the older generation in the workplace. The Ethekewini Municipality seems to have a disparity between millennials and the older generation based on perceptions each generation has of the other (Moodley, 2019). The primary reason for the disparity between the two generations is that millennials were born into a changing environment driven by the advancement of technology, and they have the perception that older employees do not know

much about technology, which has left them feeling disconnected from the older generation (Keith, Warshawsky & Talbert, 2021). Millennials do not have the patience to understand that local government has over many years used manual systems and that it will take time for all spheres of government to transition to the fourth industrial revolution (Watts & Dieffenderfer, 2020). Millennials also do not have the patience to understand that the top and middle management in local government, like other organisations, comprises of older employees who may take longer to master and navigate technology (Porter, Gerhardt, Fields & Bugenhagen, 2019). An understanding and acceptance between the two generations could be beneficial in the municipality which could result in a mutually beneficial relationship in which millennials and the older generation transfer and share their expertise with each other (Behson & Beutel 2018). Millennials are the generation that was born in the era of the ascent of the internet, therefore, they expect to work for organisations that are aligned to the optimisation of the fourth industrial revolution (Leon, 2018). Their upbringing ensures that they are more reliant on technological solutions than the older generation who rely heavily on manual systems (Chavan, Galperin, Ostle & Behl, 2021). Therefore, millennials join organisations such as the municipality with expectations of a work environment that is technologically advanced and utilises technology to accomplish day-to-day tasks (Sinha & Bagarukayo, 2019). Furthermore, millennials are influenced by the ever-changing industrial revolutions which are geared to streamlining processes for continued improvement (Bittner, 2019). This requires leaders in the private and public sector to understand millennials and to prepare the work environment to accommodate and include them (Alonso-Almeida & Llach, 2019).

Hence, the fusion of the fourth industrial revolution into the municipality will lead to the attraction and retention of millennials who are best placed to prepare for the future, including the use of advanced technology (Waltz, Munoz, Weber & Rodriguez, 2020). There has been a shift in the government of the Republic of South Africa towards the utilisation of the initiatives of the fourth industrial revolution to secure a better future for the country (Nxumalo & Nxumalo, 2019). The government's strategy places millennials at the forefront of driving the fourth industrial revolution across all spheres of government to secure a prosperous future for South Africa (Govender & Reddy, 2019). The government has acknowledged that South Africa is lagging behind in the utilisation of fourth industrial revolution initiatives (Govender & Reddy, 2019). As such, it can be said that the government has not fully embraced the fourth industrial revolution and its impact in the workplace (Nxumalo & Nxumalo, 2019). The Ethekwini Municipality, like other municipalities, has not yet adopted a strategy to integrate millennials and the fourth industrial revolution (Govender & Reddy, 2019). These organisations' focus is on service delivery; however, there is little effort expended on using the fourth industrial revolution to enhance service delivery (Jacobs & Pretorius, 2020). A key

challenge within the municipality is the understanding of millennials and how they operate, taking into consideration that they were born into a technologically changing environment (Larsson, 2017). The strategies of the Ethekewini Municipality do not include the younger generation and the fourth industrial revolution (Govender & Reddy, 2019). Thus, it can be said that in the municipality the inclusion of the fourth industrial revolution and millennials has not fully materialised (Jacobs & Pretorius, 2020). It is argued that millennials are not utilised to their full potential by the municipality. In addition, the municipality has not incorporated strategies to integrate the fourth industrial revolution (Govender & Reddy, 2019). The general perception is that millennials are youngsters who are not taken seriously, they lack experience and cannot make a meaningful contribution to the organisation, they therefore remain stigmatised and marginalised which leads to frustration (Hernandez, Poole, Kenneth & Grys, 2018). As a result, the stigma attached to millennials and the absence of readiness by the South African government, including the municipality, to embrace fourth industrial revolution initiatives pose a challenge to millennials who want to be in a working environment that is robust in the use of technology and innovative strategies (Biljohn & Lues, 2020). It is essential that countries in Africa, including South Africa, must be at the forefront of steering the emancipation of using the fourth industrial revolution to attract and retain millennials in the public sector (Iraki, 2018). Further to this, the public sector must drive strategies that will encourage the younger generation to take an interest in working with government to create innovative workplaces that aim to propel countries in Africa to compete in the global economy (Hartmann & Hattingh, 2018). This is evident in the White Paper on Local Government which mandates municipalities to develop innovative strategies to enhance service delivery (Kroukamp & Cloete, 2018).

The emergence of the fourth industrial revolution requires the public sector to take advantage of the revolution which will benefit the sector by utilising advanced technology, such as artificial intelligence, to enhance service delivery (Steyn & Zovitsky, 2018). The municipality is also confronted with the challenge of not having a strategic plan to prepare the workplace for millennials as future leaders who will propel the organisation to integrate the fourth industrial revolution. The Ethekewini Municipality does not have a plan that outlines how the organisation will use millennials to take advantage of the opportunities presented by the fourth industrial revolution, although this could enhance its strategy of being Africa's most caring and liveable city by 2030 (Govender & Reddy, 2019). In this context, the municipality has adopted a five-year integrated development plan (IDP) that focuses on eight key strategic points which will be implemented during the period 2018 to 2020. The IDP does not include millennials and the fourth industrial revolution as part of its strategy; therefore, it can be said that the Ethekewini Municipality is not in sync with the rest of the

world in relation to creating a workplace that uses technology to enhance service delivery (Moloi & Mhlanga, 2021). South Africa is identified among other developing countries that have been slow in the implementation of the opportunities created by the fourth industrial revolution to enhance service delivery in the local government sphere (Llale, Root & Wembe, 2020). In contrast, countries such as Singapore, China, the United States of America and the United Kingdom have swiftly taken advantage of the fourth industrial revolution particularly in the public sector (Sutherland, 2020). Table 1.1 provides an indication of the municipality’s IDP performance management matrix and priority areas:

Table 1.1: IDP Performance Management Matrix Extracted from Enterprise Risk Management, Ethekewini Municipality

| Key Performance Area | 8 point plan | Strategic Focus Area |
|--------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Municipal Institutional Development and Transformation | Supporting organisation design, human capital development and management | Human Capital Learning and Development |
| | | Human Capital Management |
| | | Organisational Development and Change Management |
| | | Healthy Human Capital/Safe and Productive Employees |
| Basic Service Delivery | Develop and Sustain our Spatial, Natural and Built Environment | Develop, manage and regulate the Built and Natural Environment |
| | | Climate response planning |
| | Creating a Quality Living Environment | Meet infrastructure and household service needs and backlogs |
| | | Address community service backlogs |
| | Good Governance and Responsive Local Government | Enabling Sustainable and Innovative solutions towards effective local governance through Area Based management (ABM) |
| | Fostering a Socially Equitable Environment | Promoting the safety of citizens |
| | | Promoting the health of citizens |
| | Financially Accountable and Sustainable City | Durban Energy Office |

| Key Performance Area | 8 point plan | Strategic Focus Area |
|----------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Local Economic Development (LED) | Develop a Prosperous, Diverse Economy and Employment Creation | Providing Economic Leadership and Intelligence |
| | | Durban Investment Promotion, and FDI Facilitation, plus Retention |
| | | Leverage, Influence and Facilitate Key Infrastructure Development and Maximise the Local Benefit |
| | | Facilitating Development in Priority Nodes and Corridors |
| | | Enterprise and Sector Development |
| | | Developing a Competitive Tourism Sector |
| | A Vibrant and Creative City - The Foundation for Sustainability and Social Cohesion | Facilitating Sustainable Livelihoods |
| | | Access and Inclusivity |
| | | To develop fundamental social infrastructure for economic participation & socio-cultural empowerment |
| Municipal Financial Viability and Management | Financially Accountable and Sustainable City | Sustainable management of stadia for socio-economic empowerment |
| | | Strategic and sustainable budgeting |
| | | Value for money expenditure |
| Cross Cutting | Develop and Sustain our Spatial, Natural and Built Environment | Sound financial management & reporting |
| | | Develop, manage and regulate the Built and Natural Environment |
| Good Governance and Public participation | Good Governance and Responsive Local Government | Ensure accessibility and promote governance |
| | | Create an efficient, effective and accountable administration |

Source: www.durban.gov.za (2017).

The Ethekewini Municipal Academy is responsible for developing strategies that will intensify innovation, learning and development within the municipality; however, the academy does not have a strategy in place to ensure that the municipality integrates the fourth industrial revolution

(Nxumalo & Nxumalo, 2021). The local government sphere requires a shift in its leadership approach to successfully integrate millennials into the organisation, thus maximising the opportunities of the fourth industrial revolution (Naidoo & Singh-Pillay, 2020). Consequently, it appears that the municipality may require a leadership style and a new set of skills to transform the working environment to include millennials and integrate the fourth industrial revolution into the workplace (Jacobs & Pretorius, 2020). A leadership style that can provide strategic direction on the integration of the fourth industrial revolution and the identification of future skills will ensure that the municipality has a futuristic view in relation to the attraction and retention of millennials in order to drive the use of technology in the workplace (Llale, Root & Wembe, 2020). It is argued that the Ethekewini Municipality may require a different leadership style to lead millennials and drive the strategic objectives of the municipality by adopting robust technological initiatives presented by the fourth industrial revolution to prepare for the future through the introduction of artificial intelligence to enhance service delivery. It is against this background that the study examines the key challenges that hinder the integration of millennials and the fourth industrial revolution into the municipality. As indicated above, the assertion is that it is the responsibility of the leaders of the municipality to guarantee the effective integration of millennials and the fourth industrial revolution into the workplace. In South Africa the role of leaders has shifted from being task oriented to providing strategic direction on how to manage future disruptions such as advancement in technology and the implementation of strategies to prepare organisations for the fourth industrial revolution (Alade, Windapo & Wachira-Towey, 2021).

Hence, the study aims to develop a leadership model that will be recommended to the leaders of the municipality to assist it in effectively integrating millennials and the fourth industrial revolution, to enhance service delivery and to prepare the organisation for a future which will be dominated by advanced technology.

1.3. Rationale of the Study

The emergence of the fourth industrial revolution has stimulated conversations amongst governments around the world on how to take advantage of the rapidly advancing technology to innovate and enhance service delivery (Beharry & Pun, 2020). In developed countries, the fourth industrial revolution has been used to include millennials in the workplace and enhance their skills to lead organisations into a future that uses robust technological solutions to create value and continuous improvement (John, Clinton & Thwala, 2021). The fourth industrial revolution will disrupt human beings, jobs and the workplace, forcing organisations to introspect, reinvent and evolve through the use of advanced technology to gain and retain competitive advantage (Bittner, 2019). Organisations both in the public and private sectors are operating in the new digital era which

is influenced by the fourth industrial revolution that has impacted people and the working environment through rapid technological changes (Herrero, Amellini & Solar-Pelletier, 2020). The rapid technological changes of the fourth industrial revolution will disrupt the expectations of millennials joining an organisation and will impact on various professions (Oosthuizen & Mayer, 2019). The public sector must prepare the working environment to align with global trends which have utilised the fourth industrial revolution to improve services to communities and have developed innovative ways to generate revenue (Mayer & Oosthuizen, 2020). Countries such as South Korea, China, the United States of America and Canada have prioritised the training and development of millennials to fast track the optimisation of the opportunities of the fourth industrial revolution to become global leaders in producing technologically advanced services and products (Vuony & Mansori, 2021). Organisations will have to prioritise the employment of millennials in the future to prepare organisations for robust technological changes in the workplace (McClain, Palokas, Christian & Arnold, 2021). In South Africa, the leaders in organisations will be forced to embrace and accept the opportunities and challenges of the fourth industrial revolution because the rest of the world has already transitioned to the fourth industrial revolution (Ofori & Sarpong, 2020). Leaders will be required in the future to manage the technological changes presented by the fourth industrial revolution (Sinha & Bagarukayo, 2019). Further to this, the fourth industrial revolution has created a mismatch between the skill set that currently exists in organisations and the type of skills required for the future (Sackey, Bester & Adams, 2017). The President of South Africa has been cited on various media platforms urging organisations both in the private and public sector to acknowledge the importance of embracing and taking full advantage of the fourth industrial revolution (Philbeck & Davis, 2019).

The president has further said that the country's prosperity is dependent on organisations in both sectors taking advantage of rapid technological changes (Govender & Reddy, 2019). Therefore, all government departments including municipalities must ensure that their strategies are aligned to the rapid technological changes presented by the fourth industrial revolution (Gatune, 2018). In this regard, the municipality has adopted a long-term strategy aimed at achieving economic growth and building a reputation for being Africa's most liveable city where all citizens live in harmony. The municipality believes that the strategy can be achieved by growing its economy and meeting people's needs so that all citizens can enjoy a high quality of life with equal opportunities, in a city of which they are truly proud (Luntala, 2021). In order for organisations in the local government sphere to achieve the goals set out in their strategies it is important to create an agile working environment that is receptive to the initiatives presented by the fourth industrial revolution (Brondoni & Zaninotto, 2018). Moreover, for organisations to gain competitive advantage from the opportunities

of the fourth industrial revolution, a significant leadership style must be identified to lead this great change in industries and economies (Caruso, 2018). The integration of the fourth industrial revolution into organisations is therefore needed to achieve an inclusive workplace culture and key strategic objectives (Marciano, 2018). The Department of Trade and Industry (DTI) has implemented the Intsimbi Future Production Technologies Initiative as one of the levers that will be used by the government to respond to the disruptive impact of the fourth industrial revolution (Zulu, Pretorius & van der Lingen, 2021). Research has shown that globally the emergence of the fourth industrial revolution has propelled most organisations to attract and retain a younger workforce that is technologically driven and innovative (Jiyane, 2021). The fourth industrial revolution compels organisations to adapt to using technology but creates an enormous challenge for municipalities that operate in the local government sphere focused on service delivery to attract and retain a younger workforce to meet the demands of the revolution (Mpungose, 2020). The Ethekwini Municipality has a significant number of millennials in the workplace and their skills are needed to make a radical shift from traditional ways of conducting business to creating a culture that is agile and innovative (Nxumalo & Nxumalo, 2019). Traditional ways of conducting business and bureaucracy hinder the inclusion of millennials and the fourth industrial revolution in the workplace (Oosthuizen & Mayer, 2019). In most organisations, the leaders are still stuck on traditional ways of conducting day-to-day business operations, which frustrates millennials who want to enter a workplace that has already transformed (De Wet & De Kock, 2021).

Some organisations have realised that the fourth industrial revolution requires a workforce that is responsive to the demands of the rapid technological advances that are taking place across industries (Erasmus, 2021). Research has also shown that the emergence of the fourth industrial revolution has propelled most organisations to attract a younger workforce that is technologically driven and innovative (Oppermann, 2021). Thus, organisations and government departments, including the municipality, must consider creating a proactive culture that is ready to embrace the initiatives presented by the fourth industrial revolution, such as automation, digitalisation and the use of social media as a communication tool, to accommodate millennials. Organisations must create an organisational culture that is receptive to utilising the initiatives presented by the fourth industrial revolution which are used universally to create efficient processes (Bosch & Rossouw, 2021). Therefore, organisations such as the Ethekwini Municipality should consider developing leaders who are able to understand the preferences of millennials, such as communication channels, business processes and conditions of employment which are influenced by the use of technology. The municipality has realised that millennials are at the centre of the fourth industrial revolution, hence the need for a leadership style that can provide a working environment that stimulates millennials,

and which provides leadership and guidance (Philbeck & Davis, 2019). The municipality may require a new set of skills to drive the integration of the fourth industrial revolution and millennials. Having said that, an appropriate leadership style must be identified to lead millennials (Naidoo, 2020). The fourth industrial revolution has emerged as an industry disruptor which forces organisations to make an effort to understand the impact of the revolution on the workplace and the people within the workplace (Ostrowick, 2021). Millennials were born into the emergence of the fourth industrial revolution during the period of the 1980s to the 2000s (Costello & Westover, 2016). This is supported by Howe & Strauss (2005) who refer to millennials as generation Y, ie those who were born after 1982 who have a work ethic that is aligned to the recognition of their skills and are highly influenced by technology. They require a leadership style that is able quickly to adjust to the rapid changes that occur in the global context and impact on organisations such as the municipality. Consequently, it is evident that a leadership model is needed to integrate millennials and the fourth industrial revolution within the municipality and the public sector at large. The study therefore aims to engage leaders and millennials through various data collection methods to identify a leadership style that is better suited to lead the integration of millennials and the fourth industrial revolution within the Ethekwini Municipality.

1.4. Problem Statement

The Municipal Institute of Learning at the Ethekwini Municipality held a seminar in 2018 where the speakers employed by the municipality asserted that it was important for the organisation to win the minds of the millennials as they will be the key drivers of the fourth industrial revolution (Mile, 2018). The Ethekwini Municipality employs a significant number of millennials, as highlighted above, in various occupational levels and departments; however, the organisation does not have a strategy to integrate millennials into the workplace (Mile, 2020). As a result, the municipality does not realise the potential and contribution that millennials can have on the organisation. The leaders of the municipality are focused on service delivery which leaves millennials disgruntled, unmotivated and unsatisfied with their jobs (Govender & Reddy, 2019). The municipality has not paid attention to the advantages of having a young workforce in the era of rapid technological advancement to enhance service delivery. Leaders in some municipalities are not preparing for change and are not perceived to be anticipating and leading the change required to champion the fourth industrial revolution in the local government sector (Cityinsight, 2020). As a result, millennials may leave the public sector, the area in which the municipality operates, to join the private sector (Dlamini & Nzimakwe, 2021). The poor talent management practices and procedures in local government have contributed to the Ethekwini Municipality not attracting and retaining talented employees (Zama, 2018). The expectations that millennials have of the organisation and its

leaders are not understood in the organisation, which leaves them frustrated (Schoeman & Rampedi, 2021). The work preferences and reliance of millennials on technology at work is seen by the leaders as lazy, wanting to take shortcuts and not wanting to think critically to solve problems (Maziriri, Maramura & Nzewi, 2019). The lack of effective talent management strategies to retain employees and keep them engaged has played a role in employees believing that joining the Ethekewini Municipality is merely a means to secure a job and not a way to enter into an innovative and agile workplace in which they can excel (Dlamini & Nzimakwe, 2021). The authors' further state that there is a need in the local government sphere to implement talent management strategies to attract and retain talent. Research conducted by the South African Cities Network in 2021 revealed that there is a need in the Ethekewini Municipality to craft a new strategy to address systematic and structural organisational deficit (Sacities, 2021). The leaders in the municipality must find ways to work against the current system in which certain employees are not willing to adapt to change and to protect those employees who are motivated and have innovative ideas (Sacities, 2021). As a result, millennials may either leave the organisation or, if they stay within the organisation, they become disengaged and demotivated. Millennials have been found to leave organisations that do not offer a creative, innovative and technology driven environment (Wolor, Nurkhin & Citriadin, 2021). Employees including millennials perceive the leaders of the municipality to be old fashioned because of their lack of appreciation for the use of technology and their attachment to the use of traditional ways of conducting day-to-day operations (Ngwane & Mabuya, 2020).

The research done by the South African Cities Network in 2021 found that management has the inability to inspire confidence in employees to become productive, and pointed out the crucial role that must be played by the human resource department in this regard (Sacities, 2021). This view is supported by Dlamini & Nzimakwe (2021) who assert that the leadership in the human resource department within the municipality is the crucial driver of the change required to ensure effective planning and implementation of talent management strategies. The lack of efficient talent management strategies may lead to a disconnection between the leaders and millennials (Van Deventer, 2019). The role of talent management is to ensure that all employees including millennials are integrated into the workplace through effective planning, talent development, succession planning and career development (Johnston & Kravariti, 2019). Millennials are frustrated that the organisation is transactional and bureaucratic, and that the working environment leaves little room for innovation and the use of the opportunities of the fourth industrial revolution to enhance the day-to-day operations of the municipality (Thusi & Maduku, 2020). This view is supported by Solaja & Ogunola (2016) who found that millennials thrive in organisations that allow them to express their views and opinions, to showcase their potential and to participate in decisions which affect their

future. The President of the Republic of South Africa in 2019 appointed a commission on the fourth industrial revolution to identify and develop policies and strategies that will escalate into action plans relevant to the integration of the revolution (4irsa, 2020). The aim of establishing a commission on the fourth industrial revolution was to position the country to participate in the global economy and to prepare it to adapt to the changes presented by the revolution, which is disrupting the manner in which people live and work (Pentz, Du Preez & Swiegers, 2020). The youth are listed as one of the prominent key role players who possess the skills and expertise in relation to the fourth industrial revolution that are necessary to tackle the opportunities and challenges presented by the revolution (Mbumbwa & Chigada, 2018). The President of the Republic of South Africa has acknowledged that all spheres of government, including the local government sphere, must take advantage of the opportunities presented by the fourth industrial revolution to enhance government (4irsa, 2020). Despite the above, the Ethekewini Municipality does not have a strategy to integrate the fourth industrial revolution and to take advantage of the opportunities presented by the revolution. The municipality's eight-point plan outlined in the IDP does not give an indication on how the municipality will take advantage of having a significant number of talented millennials in the organisation who can drive the revolution to enhance service delivery and efficiency (Durban, 2022).

It appears that the municipality is not ready to integrate millennials and the fourth industrial revolution into the workplace. The long-term strategy of the Ethekewini Municipality does not include the opportunities that the organisation has identified that will be brought about by the fourth industrial revolution (Govender & Reddy, 2019). Hence, the study aims to assess the readiness of the Ethekewini Municipality to integrate millennials and the fourth industrial revolution. The rapid technological changes caused by the fourth industrial revolution in global economies propels organisations both in the public and private sectors to prepare themselves to enter a new technological era which requires swift transformation in organisations (Csath, 2018). The new technological advancements are described as the era of the fourth industrial revolution which will drive productivity and innovation in the public and private sectors (Doval, 2021). Previous studies on the fourth industrial revolution have focused on manufacturing goods and providing services to the consumer through the use of advanced technology; however, there has been less focus on how organisations can integrate and manage the rapid technological changes in the workplace (Park, Yoon, Kim & Seol, 2021). The fourth industrial revolution has also been seen as a threat to the human race as it is predicted to introduce artificial intelligence which is reliant on robotics to perform certain jobs in various sectors (Hearle, 2013). Another challenge within the municipality is that the organisation is highly unionised and the fourth industrial revolution is perceived as a threat to jobs since most of the work is done using manual systems (De Wet & De Kock, 2021).

The introduction of automation may result in job losses, and this may be a factor contributing to the slow pace of integration of the fourth industrial revolution by the municipality (Mayne, Mayne & Louw, 2020). Therefore, the municipality requires leaders who understand the impact of the fourth industrial revolution on various facets within the organisation and are willing to prepare the organisation for the opportunities and threats presented by the revolution. Another challenge presented by the fourth industrial revolution is that a large number of millennials are joining the local government sphere at different occupational levels and are becoming the majority in the workforce profile (Mpungose, 2020). This creates a cultural lacuna between the older employees in leadership positions and millennials and inhibits the two generations from embracing each other and working together (Alen, Losada & De Carlos, 2017). Millennials are technology driven and have been labelled as an impatient generation which wants things to happen in their own way, influenced by the fourth industrial revolution (Philbeck & Davis, 2019). In contrast to this, older employees are said to be more traditional and less likely to accept the rapid changes presented by the revolution which will enable the organisation to stay abreast with the rest of the world (Schwab, 2016). Millennials are described as the future leaders of organisations who are the least engaged generation in the workplace because they are misunderstood by the older generation (Agovino, 2021).

They are also referred to as generation Y, ie those who were born into and are highly influence by the era of the revolution of technology and the internet (DeVaney, 2015). Older generation employees have been described as those who are closer to retirement and may not be technologically savvy as required by the emergence of new technological innovations (Alade, Windapo & Wachira-Towey, 2021). The older generation has always been referred to as conservative and as having a set value system which was embedded in them at an early stage in their lives; this produces a disconnection between the two generations (Mayerova & Hyzova, 2020). It creates a challenge within the municipality as the older generation may perceive millennials as a threat to their positions because they may be required to swiftly adapt to the changes that technology brings to the organisation, whereas technology is second nature to the millennials (Culiberg & Mihelic, 2016). Millennials who have entered the workplace bring with them a new set of skills and their work ethic has been described as different from previous generations (Ferri-Reed & Sujansky, 2017). Millennials are described as the global generation – those born into the emergence of the internet (Papavasileiou & Lyons, 2015). Research has also found that millennials are likely to align themselves with an organisation that suits their personal preferences of workplace culture, environment and position (Jin & Rounds, 2011). In order for organisations to attract and retain millennials in the workplace they must create a culture that is innovative and navigates towards the use of technology (Le Roux, 2018). Although the emergence of the fourth industrial revolution was

recognised in the early 2010s, the municipality like other organisations has been slow to integrate technology into the workplace (Adams, Sackey & Bester, 2016). The municipality is aware of the existence of the fourth industrial revolution, but is still set in the traditional way of conducting day-to-day operations, which poses a challenge to millennials who want to join a workplace that is innovative and technologically transformed (Gayle, Odio-Zuniga & Ramakrishna, 2021). This approach has been found to frustrate millennials who are highly influenced by technology (Alade, Windapo & Wachira-Towey, 2021). Millennials prefer to rely on information they retrieve from the internet rather than from newspapers or television programmes – this compels organisations to be more receptive to the use of the internet and advanced technology to keep millennials engaged (Agovino, 2021). The World Economic Forum shared the view that the fourth industrial revolution puts pressure on leaders in organisations to provide guidance and set a good example by aligning to the new industry disruptor which is focused on the use of technology to conduct business (Sackey, Bester & Adam, 2020). Strange & Zucchella (2017) assert that leaders in organisations must educate themselves and understand the impact that the fourth industrial revolution has on the workplace and employees at all levels and how it is changing economies, societies and the human environment. While McKenna (2017) argues that in order for organisations to gain competitive advantage from the opportunities of the fourth industrial revolution, a significant leadership style must be identified to lead this great change in most industries and economies.

The Ethekwini Municipality is encountering challenges in creating a culture driven by advanced technology which is required to attract and retain millennials, thus the need to adopt a leadership style that can integrate millennials and the fourth industrial revolution into the workplace (Govender & Reddy, 2019). The municipality has not succeeded in creating development programmes that will assist leaders to integrate, understand and collaborate with millennials to create a workforce that is ready for the changes presented by technology (Hamid & Ismail, 2021). Millennials expect a culture that is energised and fast paced and influenced by technology because they prefer to communicate with managers using texting and instant messaging, and this may frustrate their managers (Sunjansky, 2017). Millennials are also described as impatient; they want to work for organisations which continuously engage them and involve them in decision making and appreciate them for their skills and contribution (Wood, 2019). This need created by millennials to function effectively within the municipality requires them to be led by a leader who possesses the attributes necessary to relate to them and their needs. It is therefore argued that millennials and the fourth industrial revolution share a common feature that brings about changes in the workplace as both influence the way employees are managed (Waltz, Munoz, Weber & Rodriguez, 2020). Millennials are at the forefront of changing the operation of the workplace with their different set of principles and attitudes which

dictate how they want things to be done (Culiberg & Mihelic, 2016). Manohan (2017) argues that the benefit of embracing millennials within an organisation has the potential to transform business strategies and create new sources of value for existing and potential customers and create new stakeholder relationships. It has become evident that businesses need to create and maintain their competitive edge, and it has been suggested that millennials have the capability to provide solutions that are innovative if they are mentored and managed effectively (Gewald, Wang, Weeger, Raisinghani, Grant, Sanchez & Pittayachawan, 2017). Having highlighted the benefits and positive influence that millennials portray to the municipality, the challenge is that millennials require a leadership style they can resonate with, which this study seeks to explore. The municipality has been operational for a long time and has a solid culture that has existed for years which may hinder the process of transforming the organisation at the pace that millennials anticipate (Nxumalo & Nxumalo, 2019). This places a challenge on the leadership of the organisation to change the way that it is leading the younger generation and to create a workplace that has a culture that is innovative, flexible and engaging. Millennials want to work in an organisation where they can make a difference and one that has a culture that uses a language that is appealing to them (Calk & Patrick, 2017).

The millennial generation prefers an organisational culture that promotes freedom, effective communication and an environment that encourages personal growth (Valenti, 2019). The public sector, including municipalities, has always had a bureaucratic approach, which may not be open to millennials wishing to contribute to making decisions that could impact on the functioning of the public sector (Tapscott & Cameron, 2015). To overcome this a leader is required who understands how millennials think, who can nurture and identify their capabilities and create an environment that is inclusive and receptive to new ways of doing things (Chory & Hoke, 2019). Northouse (2013) asserts that change and movement are the primary functions of leadership. In order for millennials to stay committed and engaged in an organisation, there has to be a radical shift in the culture of the organisation which will lead to a transformed and innovation workplace (Beutell & Behson, 2018). Millennials aspire to work in an organisation that has leaders who have a positive influence on performance (Okwudili, 2020). It is evident that the municipality requires a unique leader to shift the culture and mind-set of the organisation towards one that is cognisant of the differences that exist between the older generation and millennials in order to create cohesion in the workplace. To address the aforementioned challenge, the study will explore a leadership style that can be adopted by the municipality to effectively integrate millennials and the fourth industrial revolution.

1.5. Significance of the Study

The study was conducted in the Ethekwini Municipality to assist the municipality to gain foresight of the future of work and how the future of work will disturb the normal way of conducting day-to-

day operations in the organisation and how millennials will fit into a future led by the fourth industrial revolution. The study was conducted during the Covid-19 pandemic which totally changed the way organisations were used to working and propelled them to adapt quickly to the ‘new norm’ of using technology to continue with day-to-day operations (Kemi & Chijioke, 2021). In South Africa, organisations across sectors and industries were not prepared for the increased demand in the use of and reliance on technology to combat the changes brought by the Covid-19 pandemic which led to businesses, including municipalities, shutting down during the national lockdown (Beharry-Ramraj & Tshabalala, 2021). The pandemic has caused a lot of disruption in government institutions which has led to the fast tracking of the utilisation of technology; however, the negative impact has been redundancy of jobs, job losses, economic decline in the country’s GDP and most organisations struggling to cope financially with the impact of the pandemic (Mdluli & Beharry-Ramraj, 2021). In South Africa, the pandemic has required organisations to re-evaluate business models and assess the skill sets required for the future (Tusev, 2018). The technological initiatives of the fourth industrial revolution have challenged the status quo on leadership and have set apart the leaders who will be required in the future state that will be using the most sophisticated technologies such as robotics and artificial intelligence (Arora & Kumari, 2021).

The world is gradually moving into a technologically driven era which requires organisations such as the Ethekwini Municipality to prepare the workplace for changes in jobs, skills and work (Pinfold & Mokhele, 2019). The global environment is shifting towards the fourth industrial revolution to solve problems that occur in daily operations in industries and the government sector (Khyatin, 2016). The Ethekwini Municipality has a constitutional mandate to delivery efficient services to the communities it serves (Govender & Reddy, 2019). To achieve this, the municipality must be in sync with the rest of the world and offer services to communities using technology to enhance service delivery and the functioning of the organisation (Mpungose, 2021). The municipality is in an urban area and is one of the biggest metropolitan areas in the country; therefore, it must have foresight and anticipate how the fourth industrial revolution will be able to enhance the organisation and service delivery (Jiyane, 2021). The municipality in 2021 during the global Covid-19 pandemic announced that it would continue to deliver services through the use Microsoft Azure, Microsoft 365 and Teams (Durban, 2021). The employees of the municipality and the communities that the municipality services are dominated by millennials and educated citizens who are influenced by technology (Govender & Reddy, 2019). Therefore, the municipality must adopt new ways of delivering services and must transition from using manual systems and to the utilisation of automation and digitalisation (Machov, Korcsmaros, Seben, Feher & Toth, 2021). The fourth industrial revolution does not only relate to the Internet of Things which is the use of online services, an organisation such as the

municipality will require advanced technologies to improve services in departments such as water and sanitation, electricity, transport, information and technology, etc through the introduction of technologies such as cyber security, 3D printing, advanced materials including nanomaterials, artificial intelligence, robotics, drones and autonomous vehicles, geo-engineering and energy capture, storage and transmission (Lanteri, 2021). Cloete & Moloko (2019) found that information and technology departments strive to use new technologies to improve service delivery and to put in place internal controls; however, the culture in municipalities is to resist change. The municipality has nonetheless made great strides in developing an eco lab to benefit communities and to enhance skills required for the future such as coding and robotics (Durban, 2020). The leaders of the municipality are responsible for this transformation which requires a different leadership approach to integrate millennials and the fourth industrial revolution (Nxumalo & Nxumalo, 2019). The adoption of an appropriate leadership style within the Ethekewini Municipality is needed to integrate millennials and the fourth industrial revolution to create a workforce that has the required skills to assist the municipality to achieve its strategic objectives and enhance service delivery using opportunities presented by the fourth industrial revolution (Sim, Sutherland & Scott, 2016). The integration of millennials into the organisation relates to allowing the younger generation to participate in the future of the municipality by empowering them to provide solutions on the various technologies it can utilise to create the desired smart city and by providing a working environment that is innovative, engaging, agile and technology driven.

The municipality in 2021 during Covid-19 announced that it was embarking on a data-driven smart city; however, the municipality is behind on the implementation of integrated technologies, systems, cloud computing and services that will enable open-access (City Insight, 2020). This view is supported by Ngwane & Mabuya (2020) who interviewed participants in the ICT Department at the Ethekewini Municipality and found that the implementation of new technologies in the municipality is arbitrary and not planned. They further revealed that the municipality does not have a strategy to improve existing technologies and only utilises basic technologies to conduct day-to-day operations. The new digital era led by the fourth industrial revolution requires leaders who can facilitate this change with an understanding of the fourth industrial revolution and its impact on employees and communities. Furthermore, the leaders in the municipality must be equipped with the skills to tackle the challenges presented by a changing working environment and to lead in the era of advanced technologies. Therefore, a different leadership approach may be required to change the current status quo and to adapt to a working environment that envisions the municipality having a smart city by 2030. One of the challenges that has prevented South African municipalities from fully implementing smart cities is the lack of integration of the smart city strategy into their IDPs for

practical implementation (City Insight, 2020). In this regard, the municipality will require leaders to drive the integration of the smart city in the IDP and to implement the strategy, not in isolated projects, but holistically throughout the organisation. Information gathered by City Insight (2020) from the Media Information and Communication Technologies Sector Education and Training Authority revealed that 70% of employees in municipalities, including the Ethekewini Municipality, are in technical positions and a few are in managerial positions. The lack of IT skills in the various management levels poses a challenge to the integration of the fourth industrial revolution. According to Schilpzand, Houston & Cho (2018) leadership in general has the ability to set the tone for an organisation to motivate employees and create an empowering working environment. Similarly, research done by Schoemaker, Heaton & Teece (2018) found that an appropriate leadership style must be adopted to achieve a specific objective such as leading an organisation from one phase to another.

1.6. Research Objectives

The aim of the study is to develop a leadership model to integrate the fourth industrial revolution and millennials into the Ethekewini Municipality. The objectives of the study are to:

- Determine the leadership style required to lead millennials and the fourth industrial revolution.
- Explore the impact of the fourth industrial revolution on attracting and retaining millennials in the Ethekewini Municipality.
- Assess the readiness of the Ethekewini Municipality to embrace the opportunities and challenges presented by millennials and the fourth industrial revolution.
- Develop a leadership model to integrate millennials and the fourth industrial revolution into the Ethekewini Municipality.

1.7. Research Questions

- Which leadership style is appropriate to integrate millennials and the fourth industrial revolution into the Ethekewini Municipality?
- How does the fourth industrial revolution impact on attracting and retaining millennials in the Ethekewini Municipality?
- Is the Ethekewini Municipality ready to embrace the opportunities and challenges presented by the fourth industrial revolution?
- What is the best leadership model for integrating millennials and the fourth industrial revolution into the Ethekewini Municipality?

1.8. Research Design

This study was conducted using a mixed research methods approach, which assisted the researcher to gather data that is numerical and non-numerical through the use of various data collection methods (Saunders, Lewis & Thornhill, 2016). The researcher interviewed leaders and millennials whose opinions, based on experience, were critical for the researcher to gather data to answer the objectives of the study. The data was collected through interviews with leaders, a questionnaire with millennials and a focus group with millennials to support the data collected from the questionnaire. The focus group was introduced as a result of the Covid-19 pandemic. The use of mixed methods to conduct research provides a balance in the epistemological differences that exist in quantitative and qualitative studies (Khanna, Lakhani, Bhadada, Khan, Dave, Alam & Hewett, 2021). The researcher interviewed the leaders first. Secondly, an electronic questionnaire was circulated to the millennials, and lastly, because of the Covid-19 pandemic, the millennials could not access the internet to complete the questionnaire and a focus group was added to support the data collected from the questionnaire. Qualitative data collection methods such as interviews were used to gather information from individuals at the Ethekewini Municipality, who are regarded as leaders based on their occupational level within the organisation and their decision-making power, to share their own experiences on the topic (Powell, Woodfield & Nevil, 2016). The study utilised a questionnaire and a focus group to collect data from the millennials (Shannon-Baker, 2015). The questionnaire was used to measure the data received from the millennials and identify correlations with the information received from the leaders.

This approach assisted the researcher to test and validate the data received from the leaders with the information received from the questionnaire and focus group conducted with the millennials. It is recognised that understanding a particular phenomenon may require the use of mixed methods to gain a better understanding of different contexts rather than using one data collection method which may be insufficient (Cresswell & Plano Clark, 2011). The researcher collected data from two groups of participants who are in different occupational levels and age groups. Using mixed methods may be beneficial, if a researcher wishes to conduct interviews and a focus group to develop a conceptual model which will generate themes and then make use of questionnaires to test theory (Sharma, 2022). Therefore, a mixed approach was favourable for the study because different data collection tools were used to gather the data to develop a leadership model that was tested through quantitative research. The use of both quantitative and qualitative methods provided the researcher with the option of exploring deeper to understand crucial variables whilst establishing the relationships that exist among variables in a statistical approach (Pusa, Isaksson & Sundin, 2021). The greatest benefit of using a mixed methods approach to gather data is that it allows the researcher to use either

exploratory or explanatory designs (Nunes, Herman, Maimone, Atlas & Grant, 2021). A mixed methods approach to a problem will allow the researcher to uncover whether there are frequent patterns or dependable relationships that exist among variables (Nunes, Herman, Maimone, Atlas & Grant, 2021). The use of qualitative and quantitative methods creates a good balance in the study since both research styles have strengths and weaknesses which complement each other (Gurtoo, 2011). A mixed methods approach provides an equilibrium that complements both a statistical and non-statistical analysis (Cresswell & Plano Clark, 2011). The study used purposive and random sampling to select participants for the study. Random and purposive sampling was used to randomly select the millennials who would participate in the study based on their age and accessibility. Purposive sampling was used to select the leaders who would participate in the study based on their occupational level, experience, and influence on decision making in the organisation. Yong (2019) found that a researcher must be able to determine, based on their study, which participants are needed to answer research objectives, the sampling technique and sample size for the successful collection of data. Random sampling is the most forthright way to select participants based on a distinctive attribute such as age, gender, etc (Almalki, 2016). Purposive sampling is the sampling method frequently used to select the right individuals to participate in the study (Kamran, Ullah & Kaleem, 2021).

Purposive sampling is a non-random method of confirming that specific categories of circumstances within a sampling universe are characterised in the final sample of the study (Denieffe, 2020). The researcher understood that choosing purposive sampling would be beneficial to the study based on the notion that the participants who had been selected would represent a solid foundation for the theoretical background that was needed to gather data (Andrade, 2021). The leaders selected for the study are in leadership positions and are expected by the municipality to better understand the topic since they are at the forefront of developing an innovative and conducive organisational culture. Purposive sampling allows the researcher to approach participants whom they think are likely to subscribe to the research objectives being explored (Kunungo, Sethi & Biswal, 2021). Purposive sampling is useful if the researcher selects participants who have an interest in the objectives of the study (Khoo & Saleh, 2017). Gull & Idrees (2022) noted that purposive sampling may also be referred to as judgment sampling, since participants are deliberately chosen to determine the data that needs to be known and to provide information related to the topic. Random sampling is also known as probability sampling because all participants have an equal opportunity to be selected to participate in the study based on a certain characteristic that has been identified to be significant (Jepkemoi, Gichunge & Masibo, 2021). This approach was considered for the study because random sampling includes choosing a definite number of individuals who will participate in a study out of

the total number of probable participants in the sampling frame (Gholamrezai, Aliabadi & Ataei, 2021). This view is supported by researchers who found that it is an advantage to use random sampling if the study aims to use a large sample which reflects percentages of the total population (Ames, Glenton & Lewin, 2019). The Ethekewini Municipality allowed the researcher to have access to the leaders and millennials in different departments and occupational levels to conduct the study. The Ethekewini Municipality has realised that there is a need to embrace the fourth industrial revolution to attract and retain millennials, and thus supported the need for the study. Therefore, the researcher was able to make recommendations to the Ethekewini Municipality by asking research questions that are relevant to the strategic direction of the organisation. The strategy of the Ethekewini Municipality is to create a culture that is inclusive of and conducive for all employees to participate in decision making. The Ethekewini Municipality has started to engage stakeholders that offer services that will enable it to connect with the younger generation of employees (Moloi & Mhlanga, 2021). Interviews were conducted with individuals who occupy influential positions and have decision-making powers and are consequently able to make a positive impact on the culture of the municipality. Those individuals were identified as department heads, senior managers and line managers. The participants were selected to provide insight on the challenges they are presented with regarding the emergence of the fourth industrial revolution and how they can attract, retain and integrate millennials into the workplace.

The researcher interviewed fifteen leaders in various departments who are in strategic positions and responsible for ensuring that the fourth industrial revolution is optimised to attract and retain millennials in the Ethekewini Municipality. The researcher identified six millennials based on their availability and access to the internet to participate in the study through a focus group. The Human Resource Department at the Ethekewini Municipality provided a list of names and locations of the participants to the researcher. Prior to the data collection process, the employees were contacted telephonically and through emails to explain to them the research topic before arranging interviews to obtain their permission to voluntarily participate in the study. The leaders were purposefully identified for the study based on their influence to change the culture of the Ethekewini Municipality to one that is required to successfully maximise the effectiveness of the fourth industrial revolution and millennials in the workplace. The researcher used semi-structured interviews to gather information from the leaders which provided the flexibility to probe further if clarity was needed. The use of semi-structured interviews as a data collection tool allowed the researcher to record data accurately and gave the participants an opportunity to share their life experiences in relation to the topic (Flanagan, Greenfield, Coad & Neilson, 2015). A list of all employees between the ages of 18 and 35 regarded as millennials employed at various occupational levels was obtained from the

Human Resource Department. The researcher randomly selected employees at the Ethekeeni Municipality based on their age, accessibility and availability to complete the questionnaires (Lusinchi, 2017). The millennials who participated in the focus group were purposefully selected based on their age, accessibility and availability. To ensure that the participants returned the questionnaires, the researcher used a tracking document which listed the names of all the participants and their departments. The tracking document was developed on an Excel document where the researcher tracked the questionnaires that were returned and those that were outstanding. Further to this, the Human Resource Department assisted the researcher to send out reminder emails to the participants to complete and return the questionnaires. It is useful to hand out a questionnaire if the study aims to gather large quantities of data from a large number of potential participants (Boydell, Gladstone, Volpe, Allemang & Stasiulis, 2012). It is beneficial to ask open-ended questions in the questionnaire to allow the participants to express their views and elaborate on them to gain more insight on the topic (Tasker & Cisneroz, 2019). The questionnaires were distributed to 332 millennials who had been identified using the following formula. The sample size was calculated using a sample size calculator which comprised of the population size of 1560 millennials, confidence level of 95%, z score of 1.96 and a margin of error of 2.

$$\text{Sample Size} = \frac{\frac{z^2 \times p(1-p)}{e^2}}{1 + \left(\frac{z^2 \times p(1-p)}{e^2 N}\right)}$$

Jiang (2018) asserts that it is crucial for data that is collected to be coded and analysed using themes that will emerge from the research questions. This view is supported by Parkin & Green (2016) who recommend the use of a coding process and thematic analysis to analyse data received from participants. The researcher used highlighter pens to develop themes from the data received from the participants. All the responses from the participants were recorded and a professional transcriber was used to transcribe the responses. Christenson & Gutierrez (2016) share the view that a researcher may choose to use quantitative analysis techniques, namely graphs, charts and statistics, which permit the researcher to explore and describe relationships and trends from the data collected. The researcher created tables or diagrams to show the frequency of occurrence and statistics to present comparisons and develop statistical relationships between variables (Hodis & Hancock, 2016). Berman, Brown & Saunders (2008) found that quantitative data can be distributed into two discrete groups, namely categorical and numerical. Categorical data was used in this study to rank the

characteristics that millennials required from a leader and those characteristics were classified into categories. Nominal data was used to sum up the total number of occurrences for each characteristic to explore the type of leadership style millennials contemplate to lead them and the fourth industrial revolution (Siedlecki & Bena, 2021). The codes were pre-set according to the sample chosen and were categorised as millennials and leaders during the data collection process. A table was used to summarise the frequency of the characteristics in each category (Nadelson & Nadelson, 2019).

1.9. Contribution of the Study

The fourth industrial revolution and millennials are emerging in South Africa and both concepts are under-researched topics (Schoeman & Rampedi, 2021). The study aimed to make a contribution to existing literature by further exploring the opportunities posed by millennials and the fourth industrial revolution in the workplace. The study aimed to explore and contribute theory by determining the appropriate leadership style required to lead millennials and the fourth industrial revolution. A leadership model was developed in the study which enhanced existing theory and will assist the Ethekewini Municipality to integrate millennials and the fourth industrial revolution into the workplace. The theory will contribute to the understanding of millennials as a generation in the workplace and also add to literature on the fourth industrial revolution that will prepare the organisation for a future which will be led by artificial intelligence. Furthermore, the study provides recommendations to the leadership of the Ethekewini Municipality to establish a leadership development programme that is aligned to the needs of millennials. The study can be used as a reference on how to integrate millennials into the workplace by understanding who they are and the contribution they can make to the success of organisations in the future. The South African Minister of Technology and Science, in a conference held by the Science Forum of South Africa, acknowledged that South Africa is moving very slowly in embracing the fourth industrial revolution in organisations, and this unfortunately sends a message that South Africa is not in sync with the rest of the world (Jacobs & Pretorius, 2020).

In addition, the Department of Trade and Industry has adopted various strategies focused on responding to the impact of rapid technological changes; however, the country has not adopted a leadership model to lead the changes brought about by the revolution (Skhephe, Caga & Boadzo, 2020). It appears that, although the President of the Republic of South Africa established a committee in 2019 to conduct research on the opportunities that could benefit the country arising from the fourth industrial revolution, the implementation of the recommendations of the committee have not, to date, translated into a plan for government to enhance all government spheres (Sutherland, 2020). This study provides a foundation for leaders in South Africa to consider how the empowerment of millennials can benefit the country in terms of fast tracking the adoption of the

fourth industrial revolution in the public and private sectors. Therefore, this study is relevant to other municipalities to provide guidelines to their leaders on a leadership model that may be adopted to integrate the fourth industrial revolution. The Ethekewini Municipality has adopted a vision to be Africa's most liveable city by 2030; therefore, it appears that, in order for it to achieve its vision, the initiatives of the fourth industrial revolution must be adopted to connect South Africa to other African countries and the world at large (Nxumalo & Nxumalo, 2021). In 2020 the world was gripped with the Covid-19 pandemic which has played a significant role in assisting organisations including municipalities to adapt to the fourth industrial revolution; however, strategies are developed and implemented by the leaders of an organisation. The pandemic disrupted the day-to-day operations of the municipality which led to the reliance on technology for business continuity. Therefore, the need to introduce a leadership model.

1.10. Chapter Outline

A summarised structure of the thesis is outlined hereinafter.

1.10.1. Chapter One: Introduction

This chapter presents the background of the study and gives a comprehensive outline of the challenges the Ethekewini Municipality has encountered with the entrance of millennials and the fourth industrial revolution into the workplace. This has brought about a need within the municipality to adopt a leadership style to effectively integrate millennials and the fourth industrial revolution. This chapter encompasses the problem statement, rationale and significance of the study to align the need to adopt a leadership style to integrate millennials and the fourth industrial revolution for the overall success of the municipality. Thereafter, the research objectives of the study and the research methodology are further outlined to provide a clear construction of how the research objectives will be accomplished. The contribution of the study is also highlighted by providing an overview of how the study will assist the municipality to integrate millennials and the fourth industrial revolution. The chapter construes the outline for each chapter that will be covered in the thesis.

1.10.2. Chapter Two: Theoretical Framework

The chapter provides an overview of the theoretical framework that is relevant to millennials and the fourth industrial revolution. The aim of this chapter is to provide insight into the various theories that have investigated the emergence of generations and how persons' birth dates have an influence on their work preferences, attitudes and value systems. Additionally, the theoretical framework provides a deeper understanding of the connection between millennials and technology. The theoretical framework further explores the organisational evolution theory and institutional change.

1.10.3. Chapter Three: Literature Review

The literature review provides a detailed analysis of the theoretical framework of the study. This chapter focuses on the various leadership theories and styles that can be beneficial to the municipality to achieve its strategic objectives by utilising millennials and the fourth industrial revolution.

1.10.4. Chapter Four: Research Methodology

The research methodology that will be used to answer the research objectives is provided in this chapter. A mixed methods approach has been selected for the study since the topic uses both statistical and nonstatistical methods to gather data. The research design is widely explored in this chapter.

1.10.5. Chapter Five: Narrative of the Interviews: Municipal Leaders

The researcher used three data collection methods to collect information. The interviews were conducted with the leaders to gain a better understanding of the organisation and its future plans for millennials and the fourth industrial revolution. The interviews with the leaders provided the researcher with a balanced view of the realities the leaders are faced with within the Ethekewini Municipality relating to their role in enabling the organisation to embrace millennials and the fourth industrial revolution. It was important for the researcher to give a detailed report of the responses given by the leaders of the municipality to ensure that the study captures the views of both millennials and the leaders. The responses given by the leaders of the municipality have resulted in the development of an instrumental solution that can be implemented within the organisation to integrate millennials and the fourth industrial revolution. Therefore, it was important for the researcher to provide a deeper understanding (based on the experiences of the leaders) of the culture of the organisation, the challenges the leaders have encountered in the workplace in relation to millennials, and the opportunities and barriers that have contributed to the lack of preparedness of the municipality to integrate millennials and the revolution.

1.10.6. Chapter Six: Results

The data collected from the participants are outlined in this chapter and the results from both quantitative and qualitative methods are analysed using statistical and non-statistical analysis as stipulated in Chapter One.

1.10.7. Chapter Seven: Discussion

This chapter provides a comprehensive discussion of the research findings. The findings outline numerous key points that narrate the importance of adopting a leadership style that will have an

effective impact on the integration of millennials and the fourth industrial revolution into the municipality.

1.10.8. Chapter Eight: Recommendations and Conclusion

The chapter illustrates the conclusions reached from the research findings and makes recommendations to the municipality based on the findings of the research on the most appropriate leadership style that can be utilised to integrate millennials and the fourth industrial revolution to prepare the municipality for a future suffused with technological change.

1.11. Conclusion

The background of the study was explicitly discussed in this chapter which also outlined the historical summary which necessitated the need for the research. This chapter further discussed the research methodology that will be used to answer the research objectives. The following chapter investigates the theoretical framework that was explored to give a detailed background of leadership theories and styles that can be used to achieve the integration of millennials and the fourth industrial revolution into the Ethekewini Municipality.

CHAPTER TWO: THEORETICAL FRAMEWORK

2.1. Introduction

This chapter explores the theoretical framework that is relevant to millennials and the fourth industrial revolution and institutional evolution. The aim of this chapter is to provide insight into the various theories that have investigated the emergence of generations and how persons' birth dates have an influence on their work preferences, attitudes and value systems. The chapter also explores the different revolutions that have led to the fourth industrial revolution and how they have influenced millennials. Furthermore, because organisations evolved simultaneously with the industrial revolutions, it is important to understand how they changed and adapted to internal and external factors. As a result, the organisational evolution theory is explored to assist leaders to understand how institutions evolve and how institutional changes can be managed. The theories that have been identified for this study investigate how a generation is formed and how the era in which a generation is born predicts that generation's behaviour and impacts on its perception of the workplace. The activities taking place in an era when a generation is born define a generation, such as, for instance, millennials were born into the age of the advancement of the internet which has had a tremendous impact on their daily lives. The traditional ways of conducting business and learning are irrelevant to millennials since they are the first generation to be born into the digital technology era (Grigera & Nava, 2021). Millennials as a generation associate with a world that is fast paced, constantly changing and driven by technology, which necessitates that organisation use digital technology (Grigera & Nava, 2021). The contention is that it is useful to understand how other generations were formed and how that led to the emergence of millennials, and how each generation is different, which influences the manner in which they view the world.

Thus, it is important to include the theories that scholars rely on to demonstrate the era in which a generation is born and how that era influences the characteristics of that generation. The argument is that many studies have been conducted on millennials from which emanate different views pertaining to the perception that other generations have on millennials (Reisenwitz, 2021). Therefore, it is important to understand the theoretical background of what influences millennials in the context of their work preferences and behaviour. A shared understanding between millennials and their managers on what millennials expect from the organisation can enhance their career planning and retention (Sinha & Kshatriya, 2016). This creates a new challenge for leaders within organisations to understand the behaviour and preferences of millennials, which can be explored through the various theories that elaborate on the development of the millennial generation. Millennials have started to transform the culture in organisations and this requires leaders who are

forward thinking and who are able to attract millennials and inspire them (Ferri-Reed & Sujansky, 2018). Therefore, organisations are expected to utilise four key strategies to integrate millennials into the workplace: workplace communication, technology and social media, corporate philanthropy and workspace design. Millennials respond to a culture that displays transparency and leaders who have an appreciation for open communication, involve millennials in decision making and provide continuous feedback (Avi & Livia, 2019). The expectations and preferences of millennials in the workplace must be taken seriously since the older generation, referred to baby boomers, are getting closer to retirement with the concomitant risk of potential voids within the leadership echelon (Calk & Patrick, 2017). Research conducted by Bauman, Marchal & McLain (2014) found that access to technology at a young age has influenced various factors, such as how millennials choose to acquire knowledge and what they prefer in an employment relationship. Thus, the need for an organisation to understand millennials as a generation, and to accommodate and integrate them into the working environment. Although it is important to accommodate the millennial generation which is influenced by technology, a brief survey of the earlier industrial revolutions is critical to understanding how the disruptions caused by the revolutions have impacted on organisational evolution.

2.2. The Theory of Generations

The theory of generations was first postulated by Mannheim in 1923 -- he described the theory as the treatment of generations as a sociological phenomenon (Wang, 2021). The fundamental basis of this theory is the understanding of the differences between generations taking into consideration differences in age groups which place individuals and groups within a certain historical time. Adir-Toteff (2021) connected the notion of tribes and generations with an analysis of constellations. The theory supports the inventiveness of various stars increasing into a constellation. The stars characterise the various tribes that occur within societies and how groups within societies originally connect spiritually into one living organism since they encompass the same energy. This relationship illustrates the energy, potency of the same ideologies required for the construction of a new generation. The construction of a generation is linked to the era in which the generation is born; therefore millennials are over-dependent on technology because they were born during the era when the internet dominated the world (Waltz, Munoz, Weber & Holly, 2020). This has resulted in millennials being exposed from an early age to knowledge and information accessed through the use of the internet. Hence, millennials as a generation are described as individuals who are knowledgeable, collaborative, social and use technology to network and connect with others (Onukwuba, 2020).

As a result, a new leadership style is required in organisations to understand this generation that is now dominating the workplace both as leaders and subordinates. Thus, the theory of generations

provides greater insight into the formation of the millennial generation. A study conducted by Mannheim in 1952 found that the formative knowledge and premature impressions of chronological coexistent individuals have the tendency to become the normal view of the world (Yaman & Cakin, 2021). The theory presents the view that younger tribes are erroneously socialised based on the disconnection of the value systems they have adopted from the older generation and the realities they have experienced (Yaman & Cakin, 2021). This theory accentuates how an era in which an individual is born influences the generation's mindset and attitude far more than their geographical area or social class. Mannheim (1928) determined after years of research that three elements form generations. The first element relates to self-conscious awareness of an individual's place in history, that is concreted by a shared response to events that are traumatic that have the potential to unite a generation through persistence and determination (Williams & Gotham, 2021). The second element relates to the impression that the youth are pertinent to stimulate changes in society and challenge the current status quo in the world, in organisations and in society in general (Persada, Dalimunte, Nadlifatin, Perwira, Anak, Prasetyo, Chin & Shu-Chiang, 2021). The third element illustrates that the youth have a tendency to unite and stand together to encourage others towards social change. Therefore, the youth offer a sense of belonging to their generation's development (Klipkova & Tsebenko, 2021). A prominent American anthropologist, Margaret Mead, studied the relationship between culture and personality development and found that younger people are known for establishing trends and because of this will mostly likely differ from the earlier generation (Setya, Rizki, Sarjiya & Sasongko, 2021).

Most of Mead's life was dedicated to studying the tribes in New Guinea, since she had developed an interest in those tribes. She found that the tribes emerged during the first world, and this brought about rapid transformation (Klipkova & Tsebenko, 2021). She further identified three generations within the New Guinea people. The first generation referred to the past of grandparents will be the future of their grandchildren (Olumide, Douglas & Charles, 2020). The second generation found that the behaviour of the new generation will be different from the older generation. The third generation established would discover new trends and it must be expected that they will have different behaviours, attitudes and value systems (Lammiman & Syrett, 2004). Klipkova & Tsebenko (2021) assert that the older generation must acknowledge that it is unlikely that millennials share common values with them since technology and social media are changing rapidly and have a great influence on them. Therefore, millennials are regarded as the generation living in the era of technology. This is supported by Tusev (2018) who found that the environment and era that millennials grow up in influence their values and beliefs. Strauss & Howe (2004) found that a generation must be studied

for at least twenty years to understand its members' lifetime from birth to the stage when they have their own children.

Table 2.1: Cohorts, Generations and Age

Theoretical Constructs

Generations: A set of historical events and related cultural phenomena that have impacted in a way that creates a distinct generational group. The identification of a generation requires some form of social 'proximity' to shared events or cultural phenomena.

Cohorts: A group of individuals born at the same time who are presumed to be similar as a result of shared experiences. Only chronological proximity to events and other drivers of difference are assumed to distinguish them from other cohorts.

Age effects: The changing views, attitudes and behaviours of individuals as they mature.

Period effects: The (often confounding) impact of environment on values, behaviours and attitudes that one must take into account when attempting to identify generational, cohort or age-related impacts.

Source: Arnett (2016:230).

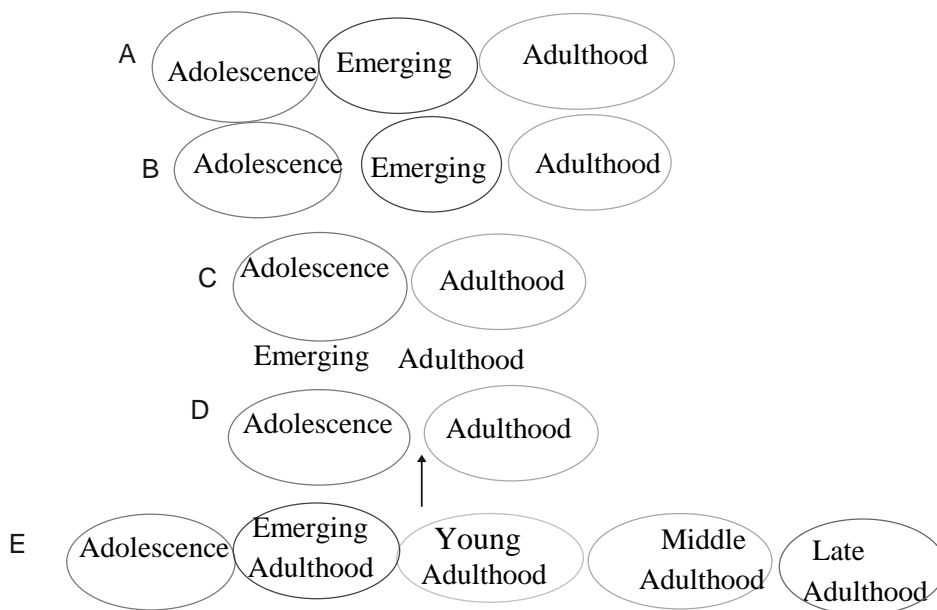
2.3. Emerging Adulthood

The theory of emerging adulthood was established in the 2000s, and since then researchers have delved more into the theory (Faas, 2012). The theory of emerging adulthood was developed to draw more attention to the reality that comparable demographic changes across developed countries in the past half century have had an impact on the lives of young people. The changes relate to tertiary education, entry to secure permanent work and the ages at which young people enter into marriage and parenthood (Arnett, 2007). The changes unlock a new period of life for the youth from their late teens stage to their 20s, which presents a distinction from the adolescents who came before or the further conventional young adulthood which follows (Arnett, 2007). Millennials at the adolescence stage develop distinctive values, traditions and lifestyles that are different from the older generation, which justify their uniqueness (Vleioras, 2021). Emerging adulthood was established as a concept to identify that adulthood is constructed as a separate life course from the transition to adulthood (Arnett, 2007). Research identified five features that make emerging adulthood unique, namely the age of identity explorations, the age of instability, the self-focused age, the age of feeling in-between and the age of possibilities (Gilal, Gilal, Tariq, Gilal, Gilal, Gong & Channa, 2021). Research has found that the emerging adulthood is focused on diverse characters, flexibility and is less structured

(Arkhipov, Vanchikova, Zolotavera, Yantranov & Budaeva, 2019). Therefore, the five features should not be viewed as universal, but as features that are common during emerging adulthood compared to other life periods. The configurations in Figure 2.1 are features that are most relevant to emerging adulthood theory since the youth enters and exits them gradually (Arnett, 2007).

The three criteria are located in all countries and across cultures for the youth to reach adulthood, and encompass being accountable for oneself, making independent decisions, and securing financial stability.

Figure 2.1: Emerging Adulthood



Source: Arnett (2007:69).

Emotional well-being increases rapidly during emerging adulthood (Galambos, Barker & Krahn, 2006). Emerging adults appreciate being given the freedom to make their own decisions and to find gratification in their advancement towards being self-sufficient -- these are traits found in millennials (Madhvan, Olino, Klein & Seeley, 2021). This view is supported by Arnett (2007) who found that emerging adults are cognitively mature which allows them to gain a far better understanding of themselves and others than when they were adolescents.

2.4. Generational Theory

The definition of a generation relates to similarities in birth years, age, location and experiences that individuals experience as part of their development (Arnett, 2016). A generation is classified by age, period, and cohort, which are defined as follows (DeVaney (2015):

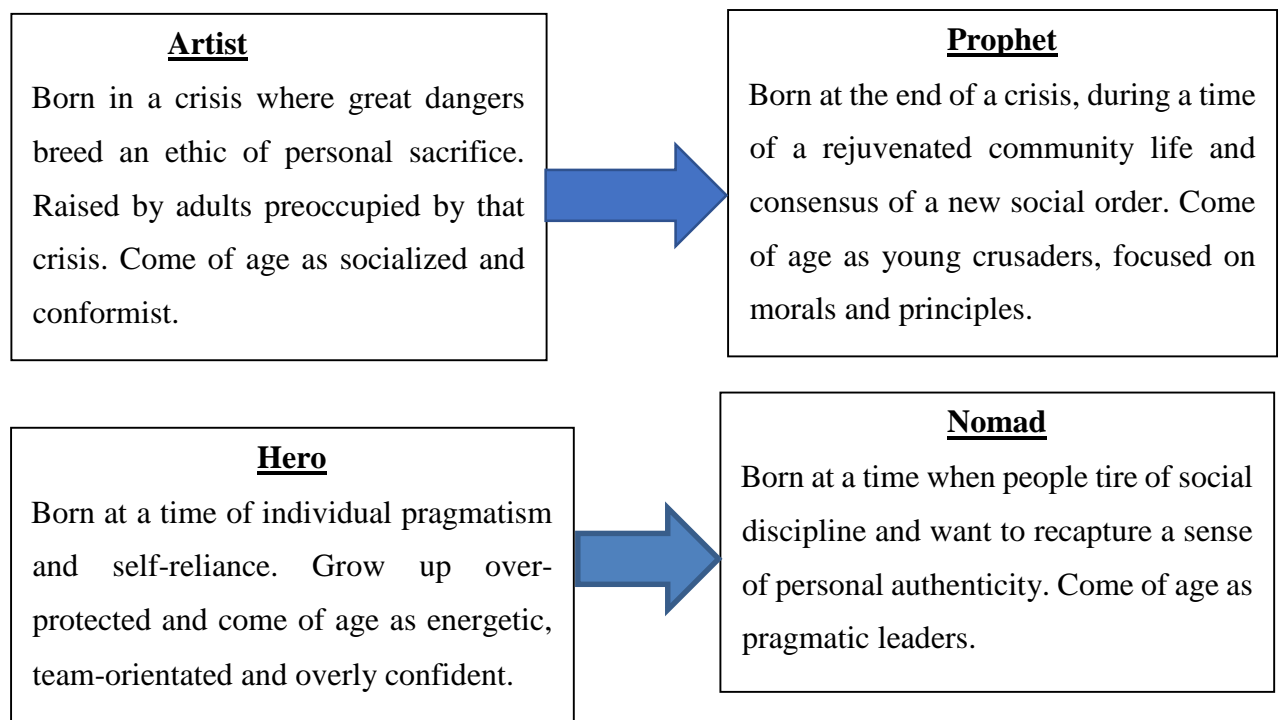
Age – is the age of a person at which life experiences and changes occur (Krell, 2017).

Period – refers to the events that occur with a person’s lifecycle (Calvo-Porrall, Pesqueira-Sanchez & Medin, 2019).

Cohort -- is a group of people who have shared common experiences during their formative years which lead to comparable attitudes and behaviours for the duration of their lives (Calvo-Porrall & Pesqueira-Sanchez, 2020).

A cohort is a group of people who are born in the same time period and journey through life together (Padayachee, 2018). A cohort is formed through external events that occur during the formative years which can be long, although normally each cohort tends to be 15 to 20 years long. Each cohort has a persona which can be either safe or reckless, individual or collegial, spiritual or secular; and are known to be attributes that can be observed and revolve between generations (Howe & Strauss, 2007). Table 2.2 illustrates the four generational characteristics to better understand how millennials emerged.

Table 2.2: The Four Generational Characteristics

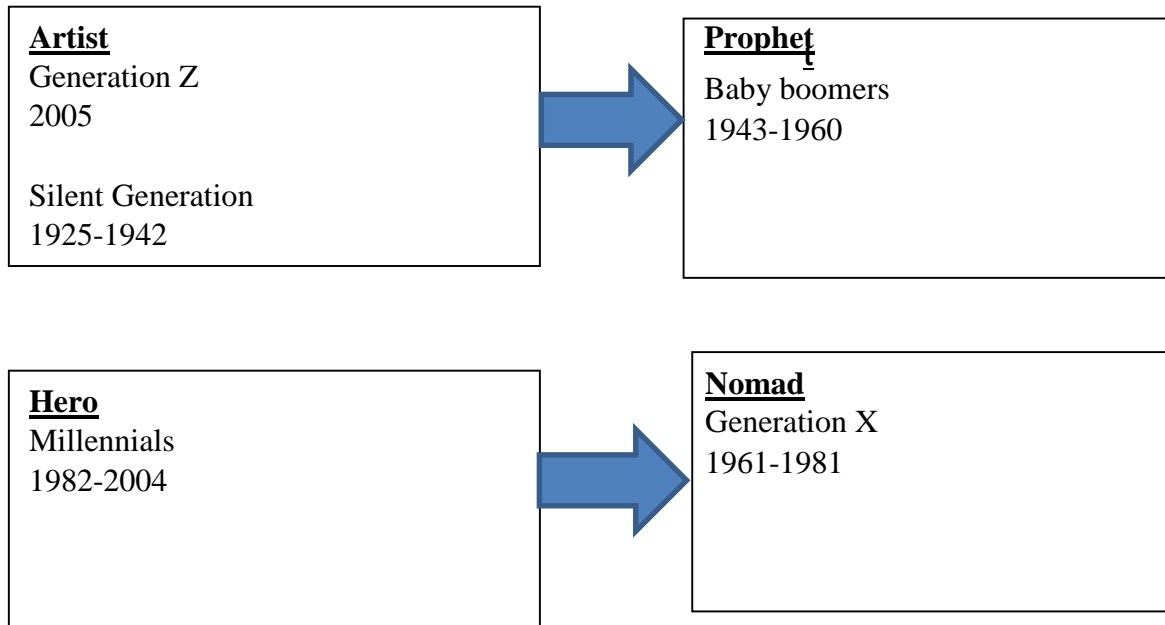


Source: Howe & Strauss (2000:98).

Each generation reacts against the value system of the previous generation to create its own identity and, like a pendulum, swings from one extreme to the other, hence, there is a constant

shift, which is referred to as the fourth turning (Padayachee, 2018). Table 2.3 presents the fourth turning.

Table 2.3: The Fourth Turning



Source: Howe & Strauss (1997:98).

Gabrielova & Buchko (2021) argue that literature has focused on sociological theory; however, there have been mixed opinions from an academic perspective on the general differences in work values unique to each generation, necessitating further research on the generational theory propounded by Strauss & Howe in 1991. The generational theory was advanced by Strauss & Howe (1997) and illustrates that millennials need to be understood as a generation. Their research found that each generation develops its own biography which gives an explanation for the personality of the generation. The model defines a generation as a cohort – a group that is influenced by its length or life span determined by a phase of life bound by peer personalities. Strauss & Howe (2000) assert that they refer to length as a phase of life which encompasses central social roles which extend over a 22-year period of a person’s life. Further to this, Strauss & Howe (1997) formed a simple lifecycle framework of four equal life phases of 22-year lengths. Hence, they define youth from the ages of 0 to 21, rising adulthood from ages 22 to 43, midlife from ages 44 to 65 and elderhood from ages 66 to 87, and submit that the life cycle of each stage is unique. It is evident in their research that the youth and the adulthood cohorts, where millennials fit in, share common attributes such as dependence which involve development, learning, accepting protection and nurturance, avoiding harm and accepting values.

The midlife stage, which incorporates baby boomers (older generation), is described as the generation whose attributes are working, starting families and livelihoods, serving institutions, and testing values. This generation appreciates leadership, parenting, teaching, directing institutions and applying value systems in their daily lives and at work. They have identified seven traits that millennials possess, namely special, sheltered, confident, team-oriented, conventional, pressured, and achieving (Howe & Strauss, 2000). Millennials have specific characteristics which define them as a generation, such as collaboration, ambition, intellectually stimulated, agile and innovative (Gabriellova & Buchko, 2021). A survey conducted in 2004 revealed that millennials would be the largest cohort in the world's history, with an estimation of the generation being 33% bigger than the baby boomer generation (Pasko, Maellaro & Stodrick, 2021). It is important for leaders in organisations to understand millennials as a generation that is new and different to them in order to find common attributes, such as their alignment to value systems (Lewing & York, 2017). Millennials have a natural attraction to technology which automatically makes them turn to the use of the internet to communicate with others and the world at large (Murphy, 2008). This means that leaders within an organisation need to prepare and/or adjust various functions within the working environment to accommodate millennials.

The generational theory provides an outline of the possible reasons for intergenerational conflict which emerge as a result of the misalignment of value systems between generations, such as is the case between millennials and baby boomers (Pasko & Maellaro, 2021). Thus, it was imperative for the generational analysis conducted by Strauss & Howe (2000) to establish the differences between generations and how they could find a common understanding. Western economies such as the United States, the United Kingdom and Australia have demonstrated a universal approach in recognising four dominant generations, namely veterans, baby boomers, generation X and generation Y (Parry & Urwin, 2011). Each generation is inspired by beliefs which have different value systems and attitudes and result in shared events and experiences (Fisher & Crabtree, 2009). The birth dates of a generation have an influence on work preferences, such as people management, recruitment and selection, and training and development initiatives (Bordonaba-Juste, Lucia-Palacios & Perez-Lopez, 2020). A survey of millennials found that they have their own interpretations of work and leisure, and work and success (Fisher & Crabtree, 2009). These differences are influenced by the parenting styles that they are exposed to at a young age, educational systems and a modern working environment. Calvo-Porrall & Pesqueira-Sanchez (2020) established that the emergence of the millennial generation as digital natives has shifted the manner in which businesses are marketing their products because technology has to be incorporated to get the attention of millennials. Organisations, therefore, need to understand millennials within the

workplace and outside of the organisation in order to remain competitive. The contention is that a generation influences how organisations recognise and reward them and has an impact on the culture of the organisation (Madhavan, Olino, Klein & Seeley, 2021). Therefore, it is important for leaders within an organisation to study and understand what appeals to millennials as a generation. Studies have identified various definitions of the generational group. Thus, the definitions of generational groups which are currently part of the workforce. Hence, baby boomers, referred to as the older generation, grew up as indulged youths later in a materialistic crisis which makes them different from millennials, who are more open and willing to learn new things. Millennials are described as a dominant civic generation which is expected to be the generation that creates the need for organisations to reassess the manner in which they conduct business (Ekmekcioglu & Nabawanuka, 2022). Esat & Kurtman (2021) conclude by expressing the opinion that a fundamental difference between millennials and other generations is that millennials are the generation that will experience great criticism in the workplace by the older generation since they have grown up over-protected and nurtured. This may lead to the millennial generation becoming needy in the workplace which could be a burden on the older generation which is used to working hard. Millennials are characterised as digitally connected, creative, solution-oriented, self-organised, open and transparent (Wai & Badri, 2020). Millennials are highly motivated by building personal relationships and developing relations with others through the influence of their technological skills and social media (Much, Nagener, Breitzkreutz & Hellenbrand, 2014). There are four approaches that organisations which engage millennials can adopt to get millennials motivated in the workplace (Saratovsky & Feldmann, 2015), namely:

First approach - provide opportunities to millennials that give them access to leadership and provide them with the necessary support to be active in their own personal development within leadership roles.

Second approach -be transparent with millennials and provide access to all information so that they gain a better understanding of the organisation.

Third approach -open communication channels which allow for millennials to engage across the organisation through offline and online social platforms.

Fourth approach - provide millennials with opportunities to develop and improve business solutions that allow them to showcase their skills and provide meaning to their contribution.

Table 2.4: Definitions of Generational Groups Currently in the Workforce

| Generation | Years of birth | Also known as |
|--------------|----------------|-------------------------------------------------|
| Veterans | 1925-1942 | Silent generation, Matures Traditionalist |
| Baby Boomers | 1943-1960 | |
| Generation X | 1961-1981 | Thirteenth Baby busters Lost generation |
| Generation Y | 1982- | Millennials Nexters Echo boomers |

Source: Strauss & Howe (1997:72).

The theories shared above provide an in-depth understanding of the formation of each generation and the differences between the generations. The theoretical framework of this study is important to understand the time period that constitutes a generation and how the activities that occur during that period affect the behaviour and attitudes of a generation. Millennials are portrayed as a generation of employees which demonstrates different aspirations in the workplace to the older generations, such as the baby boomers and generation X (Smuseneto & Musor, 2021). Thus, the time period within which millennials were born is significant to this study, since it was during the time when the internet, which greatly influences their work preferences, emerged (Yap & Yazdanifard, 2021). Millennials are distinctively defined by globalisation, rapid technological advancement and increasing demographic diversity which are events that have taken place in their lives and influence how they view the organisation they aspire to associate with (Ng, Schweitzer & Lyons, 2010). Consequently, this study has identified that the Ethekewini Municipality has to integrate the fourth industrial revolution to ensure that millennials are integrated into a workplace that optimises the use

of technology. Therefore, it is important for this study to investigate the leadership style that will ensure that millennials and the fourth industrial revolution are integrated into the Ethekwini Municipality.

2.5. The Industrial Revolutions

It is important to give a history of the predecessors of the fourth industrial revolution to gain a better understanding of how the previous revolutions evolved leading to the fourth industrial revolution. The industrial revolutions were, to a great extent, a culmination of more than two centuries of heightened economic growth fuelled by a technological revolution (Ladd, 2022). The industrial revolutions were influenced by social, political and environmental factors; however, rapid technological advancements were the focal point during the era (Rubio-Mondejar & Garrues-Irurzun, 2022). Historians classify the industrial revolutions as the first industrial revolution: mid-eighteenth century to mid-nineteenth century, the second industrial revolution: mid-nineteenth century to First World War, and the third industrial revolution: twentieth century (Bonhoure & Le Bris, 2021).

2.5.1. The First Industrial Revolution

England has been identified as the birthplace of the industrial revolution in the mid-eighteenth century. The technological changes of the revolution included the use of coal as an energy source, the steam engine, and the use of iron and steel. There was a shortage of wood, the material for making charcoal used to fire blast furnaces, at the beginning of the eighteenth century (Levin, 2021), and in 1709 Abraham Darby devised a method of producing coke from coal for use in blast furnaces to produce cost effective commercial grade iron. The steam engine, invented in 1712, was used to pump water thereby doing away with the need to use horses to power pumping systems to remove water from coal mines and prevent them from flooding (Levin, 2021). The introduction of the steam engine was momentous as it replaced the use of human and animal muscular power (Kennedy, 2022). The steam engine was an effective power generator and was used to replace windmills and watermills, whose functionality had been dependent on the weather (Andersson, Galaso & Saiz, 2019). In the latter part of the nineteenth century, the steam engine was the primary source of power for industries and transport (Scott & Spadavecchia, 2019). The first cost effective industrial process used for mass production of steel made from molten pig iron was the Bessemer process (Huberman, Meissner & Oosterlinck, 2017). This process removed impurities from the iron by oxidation by blowing air through the molten iron (Rickards & Moger, 1998). Further refinement of the Bessemer process permitted large-scale production of quality steel, which in turn led to the development of the railroad (Chin, Juhn & Thompson, 2006). In 1865, a furnace was developed which was used to heat air and

distribute the heated air to enhance the molten iron (Rickards & Moger, 1998). In 1879, the Gilchrist-Thomas process was introduced as an improvement to the Bessemer process to process ores rich in phosphorus (Rickards & Moger, 1998). The textile industry played a major role in the industrial revolution by providing humanity with clothing, a basic need (Ha-Brookshire & Labat, 2015). The textile and apparel industry, which included the production of raw materials, spinning, weaving and knitting, dyeing and printing and the production and sale of merchandise, created many jobs (Ulgen & Forslund, 2015). The rapid technological advances and the mechanisation of production processes during the first industrial revolution stimulated consumption and need for new products (Duarte, Sanches & Dedini, 2017). The technological advancements of the first industrial revolution led to the second industrial revolution, or the technological revolution, the period during which new sources of energy, mass production, technology and a surge in the supply of consumer goods and services were introduced (Duarte, Sanches & Dedini, 2018).

2.5.2. The Second Industrial Revolution

The second industrial revolution emerged in the period 1867-1914; it is also referred to as ‘The Age of Synergy’ because it was a period of great innovations and inventions focused on engineering and science (Bere, 1978). This revolution is noted for the internal combustion engine, petroleum, chemicals, communication technologies, railroad networks, electrification and mass production (Eisen, 2018).

2.5.2.1. The Internal Combustion Engine

The internal combustion engine was used as a source of power for small and large vehicles, portable devices such as chainsaws, and it played a major role as a source of power for ships and large factories (Tweedale, 1992). Oil companies were established during this era to produce fuel and petroleum to run combustion engines (Wilkinson, 1986). This created more opportunities for different markets to emerge and played a critical role in global economic growth (Edwards, 2012).

2.5.2.2. The Telegraph

The telegraph was invented in 1837 by Samuel Morse for use as a communication tool. Morse was then funded by the United States of America to build a 60 km telegraph system between Washington DC and Baltimore (Sutthiphisal, 2006). More than 50 telegraph companies had been established by 1851 (Peckham, 2011).

2.5.2.3. The Telephone

In 1876, the first long-distance telephone was conducted when its inventor, Alexander Graham Bell, carried out a two-way test of his telephone over a distance of 5 km between Boston and Cambridgeport (Teo, Unwin, Scherer & Gardiner, 2021). The test was successful, and the invention of the telephone has been described as one of the single most significant inventions of the second industrial revolution (Pleijt, Nuvolari & Weisdorf, 2021).

2.5.2.4. Bakelite

Bakelite, invented in 1907 by Leo Hendrik Baekeland, was the first fully synthetic plastic (Kennedy, 2020). Bhe bakelite was the first commercial plastic used as an electrical insulator; it was also beneficial to various industries including the production of umbrella handles and pipe stems for automobile, electrical and radio manufacturing. (Greasley, 1998).

2.5.2.5. Mass Production and Assembly Line

One of the most iconic examples of mass production was the assembly line (Duarte, Sanchez & Dedini, 2018). Its introduction led to the production of the first vehicle (Crafts, 1996).

2.5.3. The Third Industrial Revolution

The third industrial revolution is defined as the era of the transition from analog to automation and digital services and later to the segmentation of consumer markets (Duarte, Sanches & Dedini, 2018). The third industrial revolution is also referred to as the era of electronics, computers and the internet (Ionescu, 2018). The rapid developments in technology and science increased industry and market diversification and improvements in science and knowledge (Crafts, 2005). The third industrial revolution led to the development of nuclear engineering, advancements in medical studies, and the rapid spread of communication channels such as television and radio and automation (Bielenberg, 2008). During the revolution, motorised aviation progressed from one-man flights to intercontinental flights. This revolution is distinguished by the use of microprocessors, computer-aided design, optical fibre, telecommunication, biogenetics and lasers (Memmi, 2014).

2.5.4. The Fourth Industrial Revolution

The fourth industrial revolution is also known as industry 4.0 and reflects a significant change in the organisational structure of industries (Duarte, Sanches & Dedini, 2018). The revolution provides organisations with an opportunity to rethink development and offers them economic technologies, such as increased connectivity, e-commerce, e-government, artificial intelligence, quantum computing, 3D printing, the Internet of Things, electric vehicles, drones, additive manufacturing and

blockchain technology (Schulze, 2019). To achieve production goals, organisations rely on intelligent factories, cyber-physical systems, the Internet of Things and big data which are key components of the fourth industrial revolution (Chandler, 2015). The rapid transformation in organisations has made it necessary for human resource practitioners to adopt institutional evolution and provide support to organisations to manage the changes necessitated by advancements in technologies (Marivate, Aghoghovwia, Ismail, Mahomed-Asmail & Steenhuisen, 2021). The difference between the fourth industrial and the other revolutions is the pace of change that comes with the revolution (Badimo, 2019). The fourth industrial revolution is characterised by high levels of integration and sophistication, which is leading to significant changes in societies and global economies (Marivate, Aghoghovwia, Ismail, Mahomed-Asmail & Steenhuisen, 2021). As organisations such as the Ethekewini Municipality evolve it is important for institutional evolution theories to be explored as a foundation for understanding how organisations transform and how institutional change is managed.

2.6. Organisational Evolution Theory

It is common in evolutionary terms that organisations compete with others for resources; as a result their survival is decided by a combination of natural selection and rational adaptation (Simon, 1993). Change in organisations has become inevitable and has been propelled by rapid technological advancements (Kaufman, 1973). Organisations that resist change create obstacles and lose the opportunity to evolve and adapt to new methods and systems of conducting business (Pietinalho, 2017). Moreover, change in organisations is unavoidable and leaders must be prepared to provide strategic direction for institutional evolution to take place (Lomi, Larsen & Freeman, 2005). Alchian (1950) introduced the study of organisational evolution in economic studies emanating from biological evolution where the economic systems were examined as an adoptive system to ensure the survival of organisations (Vassileva, 2016). According to the organisational evolution theory, the evolution of an organisation is linked to the adaptation of individuals parallel to the evolution of the organisation (Cuellar-Lugo, Asiain-Hoyos, Juarez-Sanchez, Reta-Mendiola & Gallardo-Lopez, 2017). Organisations cannot adapt themselves and organisational evolution may be influenced by the external environment, which means that organisations are dependent on macro-environmental forces (Hodgins, O'Connor & Buckley, 2022). Adaptation has been identified in research as the main driving force of organisational evolution (Vassileva, 2016). According to Stanczyk-hugiet (2014) the evolutionary theory is linked to Darwin's research and the theory of natural selection and has been adapted with economic science which pays more attention to the dynamics and mechanisms of development and considerations which arose due to the optimisation of interests. Over the years scholars have debated the roles of individual adaptation and competitive selection, with the

selectionist position developed by Hannan & Freeman making reference to the role of selection and placing emphasis on the limitations of individual firm adaptability which is referred to as Darwinian (Hodgson, 2013). In contrast, emphasis is placed on adaptability which is referred to as Lamarckian which is known in evolution theory as the theory of inheritance of acquired characteristics (Hodgson, 2013). Lamarckism and Darwinism are approaches that are in contrast with each other in the study of organisational evolution (Grandinetti, 2018). Lamarckism and Darwinism are not mutually exclusive interpretations of evolution but coexist in different ways (Carroll & Gael, 2014). To gain a deeper understanding of organisational evolution scholars are required to include in their studies selection and adaptation, the role of organisational routines, the place of strategic choice and the growth of organisational complexity (Monticelli & Wegner, 2022). The theory of organisational evolution holds the view that the contending techniques of legitimation and competition have a long-term impact on organisational populations (Hannan, 1986). An evolutionary model referred to as variation-selection-retention was introduced by Campbell in 1960 which explains that variation leads to multiple elements, the second element (stage), selection, results in failure or success (Morselli, 2021). In the organisational evolution theory, the success and effectiveness of an organisation is measured through adaptation, survival and best adjustment (Stanczyk-hugiet, 2014). The last stage of organisational evolution is retention which is referred to as the stage where an organisation is able to determine selected deviation that expands the feasibility of survival (Stanczyk-hugiet, 2014). Research conducted by Andersen (1994) developed a sequential organisational evolutionary process that can be adapted by organisations. The evolutionary process developed by Andersen details the following:

- a. The attributes of an organisation have an influence on its activities in its relationship with the environment (input and output).
- b. An organisation's ability to face the challenges brought by external forces influences the effectiveness of the organisation.
- c. The success of an organisation can influence the possibilities of expansion and having competitive advantage towards rivals.
- d. The evolution theory creates dynamic change in organisations and the same routines within an organisation if applied to new conditions generate different results.
- e. The processes of selection and variation have an influence in the evolution of an organisation. The condition of the industry/sector in a particular period determines the feasibility of survival in the future.

Rapid changes require managers not only to adapt day-to-day operations but to evolve and re-think business concepts, the mission, and the strategic objectives of an organisation, adapting from

shareholder primacy to multi-stakeholder business models (Zollo, Bettinazzi, Neuman & Snoeren, 2016). The capability of society to respond to changing conditions is dependent on the responsiveness of organisations (Hannan & Freeman, 1989). As organisations evolve leaders must consider the dynamic capabilities framework which is critical in the study of the evolutionary change process that organisations go through in their quest to evolve, innovate and adapt to changes in the internal and external environment (Herrmann-Pillath, 2019). The contemporary changes that take place in organisational environments are influenced by externally induced change which affects internal change (Terreberry, 2017). The evolution of organisations is accompanied by viable systems which increase the systems' ability to learn and perform in line with changing contingencies in the environment (Kellogg, 2019). All industries in different sectors consist of organisations which are composed of people which influence organisational evolution (2007). Leaders are crucial components within an organisation and have both a direct and an indirect influence through the decisions they make and the actions they take; these in turn affect organisational behaviour and impact on organisational evolution (Burdon & Sorour, 2018). As societies evolve organisations are required to design solutions for economic and business challenges with the assistance of technological advancements (Grandinetti, 2018). The organisational evolution theory has been described in various studies as the theory that examines how social and environmental conditions influence changes in organisations and how new organisations are created, how strategies are formulated and how organisations evolve as a result of the changes (Cuellar-Lugo, Asiain, Juarez-Sanchez, Reta-Mendiola & Gallardo-Lopez, 2018). Organisations such as the Ethekewini Municipality are compelled to change and adapt to various disruptions, including advancements in technology.

2.6.1. Organisational Ecology

Organisational ecology theory studies how organisational populations evolve and how they transform over time through the stages of founding, growth, transformation, decline and death (Hannan & Freeman, 1989). The focus of organisation ecology is organisational diversity which investigates how social conditions affect the rates of creation of new organisational forms and organisations, the rates of demise of organisational forms and organisations, and the rates of change in organisational forms (Singh & Lumsden, 1990). The significance is on the evolutionary dynamics of processes that influence organisational diversity in contrast to the prevalence of adaptation in the study of organisations which organisational ecology explores the function of selection processes (Mckinley, 2010). Organisational ecology was developed to describe and explain the markets and the industries in which they belong (Zollo, Cennamo & Neumann (2013). The organisational ecology theory emanated from the need to understand organisational diversity and to investigate why there was a variety of organisation and why the number of those organisations was diminishing (Freeman &

Hannan, 1983). Organisations may require similar skill sets and routines to remodel inputs into output, as such organisational forms evolve as they are exposed to various changes that occur in the organisation (Ferreira da Silva, Guevara, Joao, Goncalves de Oliveira & Fernandes, 2017). Organisational theories often do not acknowledge the reasons why organisations do not evolve and why there is a slow pace in embracing changes that occur outside of the organisation (Morselli, 2021). Hence research conducted by Hannan & Freeman (1984) found that long-term change in organisations occurs through selection rather than adaptation. They argue that organisations strive towards building a culture of consistency of replication, reliability and accountability in order to create high performance environments (Hannan & Freeman, 1984). Over time as organisations evolve, their business practices and routines become enhanced and well established and acquire long-term consistency (Hannan & Freeman, 1984). Once organisations have maintained consistency, the institutionalisation of structures, routines, processes and procedures are established which leads to reliable performance within the organisation (Chess, 2001). Although organisations can maintain consistency it is important for leaders to understand that change is inevitable because organisations are faced with economic, social and external constraints such as technology, market changes and forms of authority (Faik, Barrett & Oborn, 2020). The structural inertia theory, that is a subset of organisational ecology, shares the view that leaders who are not ready to deal with change may lead organisations that struggle to keep up with change (Ribeiro & Pestana, 2020).

In the light of this, it was important for this study to focus on organisational ecology to understand how organisations evolve and how change occurs in order for leaders to prepare for societal, economic, political and environmental changes. According to Vassileva (2016) change can be evolutionary or revolutionary depending on the nature of the change and development factors which are unique to each organisation.

2.7. Institutional Change

Organisations evolve and go through change due to considerable interest; and change can either be evolutionary or revolutionary, responsive or proactive (Burke, 2002). Research has found that change can occur through organisational survival or death and can also be self-organised through complexity (Monticelli & Wegner, 2022). Internal organisational dynamics vary based on the complexities of the sector/industry in which the organisation operates (Glor, 2014). Organisational dynamics that lead to institutional change arise from political dynamics of intra-organisational behaviour (Hermann-Pillath, 2019). Change occurs in response to various factors such as organisational culture, organisational crisis, leadership, strategy and changes in the availability of resources (Kellogg, 2019). Institutional change is unavoidable in organisations due to a number of factors; however, leaders in organisations

must be willing to adapt and create working environments that promote change and innovation (Altay, Goksal & Kirmizikusak, 2022). Institutional change is focuses on the rules, policies and procedures that control the relationship between organisations and society and the relationship between the organisation and other organisations in various sectors (Wegerich, 2001). The definition of institutional change must incorporate shifts in value systems, changes in formal and informal norms, and changes in standards in organisational behaviour between organisations and the society and other organisations (Uberbacher & Scherer, 2020). Leaders must conduct an assessment in organisations to determine the level at which change has manifested because change varies from one organisation to the other (Abdelal, 2015). Leaders play a crucial role in adaptation during institutional change because change occurs as a result of self-conscious decisions that leaders make within the organisation (Venturini, 2019). According to Shepsle (1989) institutional change takes place when a significant number of people have the ability to disrupt an institution. The process of institutional change can be disrupted by disgruntled individuals within an organisation who have the authority to make decisions; hence, it is important for leaders to be at the forefront of encouraging positive change (Wegerich, 2001). The focus on decision making and power relating to institutional change provides for a combination of demand and supply approaches to induce institutional change; therefore, the role of power structures and power relations is key to analysing institutional change (Wegerich, 2001). The two approaches of institutional change which are demand and supply induced change are referred to as cooperative and imposed institutional change (Hechter, 1990).

The key factors that create organisational dynamics which have an impact on institutional change are individual motivation, organisational culture and change patterns (Millan, 2022). Institutional change occurs in complex organisations that have more capacity for change and evolution (Faundez, 2016). Leaders in organisations must have an understanding of when, which and how organisations change (Dacin, Goodstein & Scott, 2002). Organisations are regarded as relatively enduring political and social institutions, and their norms and rules influence behaviour which cannot be changed easily or instantly (Mahoney & Thelen, 2010). Therefore, leaders in organisations must create structures and motivations to manage the impact of political, social and economic factors (Venturini, 2019). New organisations are created, others weaken and others adapt to the demands of the modern world in order to remain sustainable (Harries, 2012). Institutional change emanates from four main sources, mainly institutional entrepreneurs, structural overlap, external shocks and competing institutional logics (Harries, 2012). Governments are required to transform and as technology advances there is pressure on the public sector to evolve (Ribeiro & Pestana, 2020). The pressures exerted on governments are manifested by financial and economic crises, changing public expectations, new kinds of organisations and public engagement (Gentemann, Erdmann & Kroger, 2020). The EtheKwini

Municipality is currently faced with an evolving and modern society that has different needs influenced by the need to use advanced technology to deliver services; therefore, it is imperative for leaders to be at the forefront of encouraging positive change brought by millennials and the fourth industrial revolution.

2.8. Conclusion

The literature on the classification of generations is important in this study to provide a foundation on the emergence of millennials in order to understand them better as a generation. For the Ethekewini Municipality to effectively integrate millennials into the workplace, the leaders must understand the background of generational cohorts to appreciate the impact they have on the upbringing of a generation. Millennials were born during the rise of the internet and advanced technology; hence they have easily and quickly adapted to technology. Millennials' reliance on technology for information and solving problems is linked to the era in which they were born. Therefore, in order for leaders to eliminate the gap that exists between themselves and millennials, they must understand the events that took place during the years when the millennials were born. It is important for the Ethekewini Municipality to develop a leadership model that millennials will relate to, whilst also building a culture that will enable millennials to make a contribution to the organisation.

The study has highlighted the first, second and third industrial revolutions to ensure synergy with the fourth industrial revolution. The inclusion of a description of the preceding revolutions provides an understanding of how they evolved and the impact they had on organisations leading to the emergence of the fourth industrial revolution. The organisational evolution theory was discussed in this chapter to provide a foundation on how organisations evolve in response to social, economic, political and environmental changes. The Ethekewini Municipality is faced with the challenge of a modernised society and workforce who have evolved as new technologies are introduced; therefore, there is a need to provide an understanding of organisational evolution to ensure that change is managed in the appropriate manner. The study further explored institutional change which is an important theory in organisations to assist leaders to understand why change happens and how to manage change as an organisation evolves and transforms in response to internal and external factors. The next chapter presents the literature review which focuses on investigating current research on the topic and to present data supporting the need for the study.

CHAPTER THREE: LITERATURE REVIEW

3.1. Introduction

This chapter explores existing literature on millennials and the fourth industrial revolution to establish a leadership style that can effectively lead millennials and the fourth industrial revolution. The emergence of millennials as the majority of the workforce in most organisations compels organisations to attempt to understand this generation that is driven and motivated by the fourth industrial revolution. Organisations have realised that millennials and technology cannot be disconnected; hence, the need for the study to explore both phenomena (Alonso-Almeida & Llach, 2019). The study aims to develop a leadership model that can be adopted by the leaders of the Ethekewini Municipality to integrate millennials and the fourth industrial revolution; this requires an interrogation of various leadership styles that possess the qualities needed to confront this enormous challenge. Millennials are a force to be reckoned with since labour statistics reveal that by 2018 they made up 50% of the workforce and this percentage will grow to 75% by 2025 (Thompson & Thompson, 2017). In countries such as the United States of America, the younger generation is now the largest sector of the workforce (Watts & Dieffenderfer, 2020). Therefore, organisations such as the public sector must be prepared for this generation and put into place a strategy that keeps them stimulated in the workplace (Wai & Badri, 2020). The younger generation has emerged as the majority of the workforce across organisations, and this necessitates a dynamic shift towards developing organisational cultures that are innovative, flexible and agile, propelled by the use of technology (Calk & Patrick, 2017).

Leaders in the public sector must encourage talented and skilled millennials to enter the public sector to increase the effectiveness of the sector (Wood, 2019). In preparation for millennials, who are different from the older generations, to enter the public sector, leaders must ensure that they understand the millennial generation and its preferences in the workplace (Alonso-Almeida & Llach, 2019). Hence, the Council of Economic Advisers (2014) said that the younger generation differentiates itself from the older generation by its relationship with technology and education and its approach to career and organisations. In this regard it has been found by various studies that the younger generation, referred to as millennials, has become a contributor to the overall functioning of organisations, and this clearly requires the leadership to understand the characteristics of millennials (Gong, Ramkissoon, Greenwood & Hoyte, 2018). Previous studies have shown that there is a distinct relationship between millennials and the fourth industrial revolution, with millennials being described as digital natives who are capable of adapting to the era of technological changes (Pramod, Ganguly & Mukherjee, 2020). Therefore, the emergence of millennials requires leaders to

change aspects in their organisations to create an organisational culture that integrates millennials and the fourth industrial revolution. The older generation (baby boomers) prejudge the millennial generation before they enter the job market and struggle to figure out how millennials should be managed (Watts & Dieffenderfer, 2020). Based on their stereotypical understanding of millennials, the older generation does not take millennials seriously in the workplace. Hence, this compels an organisation such as the Ethekewini Municipality to adopt a leadership style that can be adaptive to millennials and the fourth industrial revolution since both have disrupted the workplace in various ways (Nxumalo & Nxumalo, 2020). Against this background, the literature review is thematically organised as follows: firstly, the White Paper on Local Government to ensure that municipalities align with global and international trends, Secondly, the emergence and integration of millennials is explored, including the use of rapid technologies, the fourth industrial revolution, its threats, opportunities and impact in the public sector are examined. Thirdly, the concept of leadership is broadly explored including a comparative leadership approach from African and Western countries. And finally, the literature review concludes by exploring pertinent leadership styles that relate to the fourth industrial revolution and millennials in the workplace.

3.2. The White Paper on Local Government

The White Paper on Local Government acknowledges that government has an obligation to ensure that local government is transformed to prepare for the challenges of the future (White Paper on Local Government, 1998). This study is premised on the understanding that municipalities must be governed in a manner that aligns with global and international trends (Donald, 1999). This view is supported by Farole (2021) who stated that the South African government must ensure that municipalities are able to compete globally through the use of rapid technology to enhance service delivery. The Ethekewini Municipality operates within the local government sphere and has an obligation, as prescribed in the white paper, to attempt to build competitive industries using technology to enable it to compete internationally and deliver services efficiently (Ncoyini & Cilliers, 2020). The white paper further encourages municipalities to work with communities to find and develop sustainable ways to improve service delivery and the quality of life using the fourth industrial revolution (Ntombela & Jili, 2020). The municipalities in South Africa will be compelled to align to the fourth industrial revolution by implementing integrated development plans which empower them to compete in the global sphere (Masuku & Jili, 2019). The Ethekewini Municipality employs a significant number of young people and has the benefit of utilising their skills to enhance the municipality and to achieve the objectives set out in the white paper (Gumede, Byamukama & Dakora, 2019). The white paper expresses the view that municipalities in South Africa must develop robust integrated development plans influenced by the fourth industrial revolution that consider the

needs and dynamics of the areas in which they operate and must implement strategies that will enhance the vision of providing long-term solutions to delivering services and servicing the needs of communities (Osah & Pade-Khene, 2020). Most municipalities, including the Ethekewini Municipality, have five-year integrated development plans in place which do not include the future of work and how technology will be used to enhance the short, medium and long-term objectives of the municipalities (Kanyane, Mutema & Zikhali, 2020). The White Paper on Local Government states that municipalities must do an assessment of the current and future social, economic and environmental needs in their municipal areas and ensure that their integrated development plans include technologies that will make them function efficiently (Ncoyini & Cilliers, 2021). Municipalities must be at the forefront of advancing the use of technology in urban areas as drivers of social and economic development (Biljohn & Lues, 2020). The white paper further states that municipalities must conduct an assessment of the skills, expertise and resources required to deliver services to their communities (Osah & Pade-Khene, 2020). Municipalities must include the younger generation into their strategies to ensure a transfer of skills essential in the future (Ntombela & Jili, 2020). It is against this background that the study advocates for the integration of the fourth industrial revolution into the Ethekewini Municipality.

3.3. Understanding Millennials

Millennials are also referred to as generation Y and are described as the generation that was born between the early 1980s and 2000s (Kilber, Barclay & Ohmer, 2014). The millennials were born between 1980 and 1996 (the early 1980s and early 2000s) and are regarded as generation Y, the net generation, millennials or digital natives. Some studies contend that millennials were born anywhere from the mid1970s to the early 2000s (Yap & Badri, 2020). Millennials are a generation with definitions such as the why generation, nexters and the iPod generation, influenced by their existence during the rise of technology (Koprivova & Bauerova, 2021). Krell (2017) argues that there is no exact point at which one generation ends and the next generation begins, nor is there unanimous agreement on what each generation should be called. Therefore, each generation is identified using the events that took place during that era. Figure 3.1 illustrates a timeline of the development of each generation in the American context and the events taking place during its emergence.

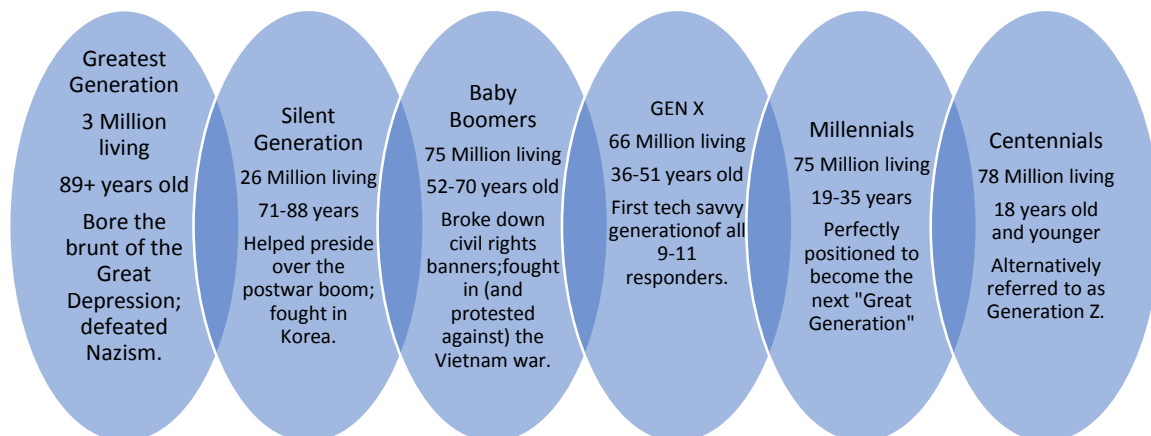


Figure 3.1: Timeline of the Development of Each Generation

Source: Krell (2017:6).

These definitions are supported by Mittendorf, Berente & Holten (2019) who found that the upbringing of millennials is greatly influenced by technology, and that technology will remain a crucial part of their lives. Millennials share a distinct connection with technology since the birth year of the internet corresponds with that of millennials (Onukwuba, 2020). Millennials started their professional working lives in the unprecedented time of advancements in technology: the birth of Google, Facebook, Twitter and Instagram, the adoption of cloud, social mobile and big data, and the explosion of cyber security risk (Krell, 2018). The internet was established in 1982, the same year that millennials came into existence (Chory & Hoke, 2019). Millennials are also defined as the younger generation that will transform organisations to transition to the fourth industrial revolution (Hershatter & Epstein, 2010). Millennials have been labelled as the next generation to be called the ‘Greatest Generation’ that is a generation equipped with the skills and tools to motivate leaders towards thinking of a future geared to utilise the fourth industrial revolution to create better and efficient organisations (Hoffman, 2017). It is the responsibility of leaders in an organisation to visualise themselves in a supervisory role, with the responsibility of managing individuals who are in a mix of generations in order to understand millennials and how they fit into the workplace (Sharma, Traeger, Tcharkhedian, Harrison, Hersch, Pickles, Harris & Maher, 2021).

The individual in a supervisory role will have to understand the characteristics of each generation to better understand it. The table below depicts how each generation differs from the others to get a better understanding of how to manage each generation according to personalities, education, experiences and ideals.

Table 3.1: Differences in Generations

| Generation | Date Range | Population | Characteristics |
|--------------------------------------------|--------------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------------|
| Traditionalists (Silent Generation) | Born 1922 to 1945 | 55 Million (52 to 62 Million) | Loyal and respectful of authority, hardworking |
| Baby Boomers | Born 1946 to 1964 or 1944-1964 | 76 Million 80 Million | Optimistic, team and service oriented |
| Generation X | 1965 to 1980 | 50 Million | Cynical, Informal, direct, want life work balance |
| Busters | Or 1965 to 1980 | | |
| Millennials | Born 1977 to 1995 | 80 Million | Confident, assertive, like praise, IoT |
| Generation Y | (1981 to 1994) (1982 to 2000) | | Like supervision and structure, digital natives |
| IGEN (GEN Z, Digital natives, centennials) | Born 1996 and later (or after 1994) | 23 Million (as of 2017) | Less focused, better multi-taskers, early starters, have higher expectation, big on individuality. |

Source: Sharma, Traeger, Tcharkhedian, Harrison, Hersch, Pickles, Harris & Maher (2021:7).

Millennials can also be defined using seven traits, namely special, sheltered, confident, team-oriented, conventional, pressured and achieving (Choubisa, 2017). The millennials generation is viewed as curious and confident about developing and implementing new ideas, whereas the older generation is reserved about venturing into the unknown (Irhamahayati & Hermawan, 2018). Additionally, millennials are regarded as the generation that has arrived to force leaders to adopt robust systems to create solutions to problems that make organisations less efficient (Kuron, Lyon, Schweitzer & Ng, 2015). Millennials are the generation that possesses the skills needed to enhance an organisation's efficiency through the introduction of technology that is innovative and contributes to greater competitive advantage (Payton, 2015). Millennials are not unique, they simply have different preferences to other generations, and hence it is a myth that they are the generation that will not survive in the real world of work (Krell, 2017). Therefore, leaders in organisations need to understand them as a generation and not create myths that produce misconceptions. This is supported by a study conducted by Deloitte (2017) which presented that millennials are perceived to be the generation that is not loyal to their employers; however, the study recommends that this lack of loyalty may be overcome by capacitating leaders in organisations to lead more effectively. Organisations must adapt to the changes that millennials will request, which include developing leaders who are bold and who do not follow the status quo (Su & Hahn, 2021).

Millennials have unique desires and preferences compared to the older generation; therefore, leaders are required to understand these desires and preferences in order to make the working environment more conducive for millennials (Hwang & Griffiths, 2017). Millennials will reshape an organisation by requiring leaders to provide information and services that are driven by technology (Reisenwitz, 2021). Millennials are a generation with advanced technological expertise compared to the older generation (Pentz, Du Preez & Swiegers, 2020). Millennials challenge organisations to adopt faster connectivity through the use of technology because they were brought up using computer-based technology, such as the internet (Diniso & Duh, 2021). Millennials require a working environment that is flexible and fast paced; therefore leaders in an organisation must develop strategies to enhance the organisational culture to align with these expectations (Sarikaya & Atsan, 2021). The millennial generation is willing to work hard provided that the organisation promotes a working environment that is interesting and provides challenging work (Watts, Laska, Larson & Neumark-Sztainer, 2016). The working environment must provide opportunities for career advancement. This compels organisations to develop practical talent strategies and to create an organisational culture that is engaging and specific to the young workforce (Hsiao, Lee, Kuo, Yeh & Chen, 2020). A different view is shared by Kara & Yas (2021) who contend that the older generation of employees in

organisations views millennials as individuals who require parental support in the workplace, which is a frustration for the baby boomers. Each generation possesses its own uniqueness and varied characteristics that distinguish it from other generations (Sarikaya & Atsan, 2021). The fundamental difference that exists between the older generation and millennials is the connection millennials have with the fourth industrial revolution, which is based on their relationship with technology, social media and cellphones (Eastman, Iyer, Lia-Troth, Williams & Griffin, 2014). The older generation is of the opinion that millennials lack experience and maturity to perform their duties because of their excessive reliance on technology (Hill, 2020). Another dissimilarity between the older generation and millennials is that millennials prefer collaborative decision making and sharing of information whereas the older generation prefers traditional management within the organisation (Chandler, 2015). This view is supported by Campione (2016) who found that millennials prefer using collaborative leadership to share and generate new ideas to create an organisation that encourages innovation, unlike the older generation of employees who prefer managing processes. Table 3.2 clarifies the perceptions millennials have on working with the older generation (baby boomers).

Table 3.2: Perceptions of Millennials on Baby Boomers

Most challenging aspects

- Reluctance to change and adapt
- Unwillingness to learn new ways of doing business
- Inability to relate to younger generation
- Inability to take millennials seriously
- Less accepting of female workers, especially those without college degrees

Most appreciated aspects

- Their attitude towards hard work
 - Their perspective, knowledge and experience
 - They are honest and one knows what is expected
 - Detail-oriented mentoring and involvement
 - Ability to teach
-

Source: Catano & Hines (2016).

The fundamental difference between millennials and the older generation is that millennials have always had access to technology and consider it an integral part of their lives (Calk & Patrick, 2017). It is the older generation that needs to align its organisational strategies to the use and optimisation

of technology (Nolan, 2019). This is evident in various studies which have shown that millennials are known to favour open communication through the use of technology on their mobile phones, whilst the older generation prefers formal traditional communication methods (Belanger, 2019). Millennials are known to use their smart phones to communicate across the organisation, which frustrates the conservative older generation (Martin, 2012). The contrast between the two generations is that the older generation perceives millennials to be demanding and insincere towards other employees who are not as technologically savvy as they are (Deal, Althman & Rogelberg, 2010).

3.4. Organisational Culture and Millennials

Organisational culture is defined as a set of shared values, beliefs, attitudes, expectations, norms and understandings that become a standard within an organisation (Jain & D'lima, 2017). The organisational culture of an organisation is shared from one generation of employees to the next and determines the degree to which an organisation accepts actions as appropriate behaviour within the organisation (Muriithi, Kyalo & Kinyanjui, 2019). The culture of an organisation is a response to the need to adapt to and endure external and internal factors to survive in a rapidly changing environment (Prasanna & Haavisto, 2018). The main objective of establishing a culture within an organisation is to ensure that the organisation has the ability to utilise its resources, including its human resources, to gain competitive advantage, obtain and maintain high performance levels and achieve organisational effectiveness (Goode, Hegarty & Levy, 2018). In the near future most organisations will have a large number of millennials on their workforce, and consequently leaders will have to develop new strategies to transform the culture in the workplace to align to the needs of the millennials (Ng & Hempel, 2020). Most organisations operate in an era of fierce competition and must also consider globalisation, thus requiring an organisational culture that has a balance between millennials and the older generation (Frederico, Garza-Reyes, Kumar & Kumar, 2021).

Global changes affect market conditions, technological transformation and economic conditions, and these compel organisations to scrutinise whether their organisational culture is aligned to international standards influenced by the fourth industrial revolution (Haffar, Al-Karaghoul, Djebarni & Gbadamosi, 2019). Organisations are faced with the challenge of transforming workplace culture with a strong focus on millennials who are known to thrive in technologically savvy organisations (Psomas & Antony, 2017). The Covid-19 pandemic has provided millennials with their ideal workplace, which includes the use of technology to conduct day-to-day business, remote working, flexibility and work-life balance (Broad & Luthans, 2020). The Covid-19 pandemic has forced organisations to swiftly develop strategies to survive the dynamics presented by the fourth industrial revolution; thus they have had to redesign their business processes and transform their

workplace culture to incorporate innovation and creativity to remain competitive (Valmohammadi & Roshanzamir, 2021). In the post Covid-19 future millennials will want to associate with organisations that are adaptable and cognisant of the trends that have been created by the pandemic, including hybrid working and using technology as enablers for business continuity (Chavan, Galperin, Ostle & Behl, 2021). Millennials in the future will be at the forefront of advancing and promoting organisational culture (Georgiev & Ohtaki, 2020). This view is supported by Saputra & Hutajulu (2020) who observe that millennials will be the future of organisations and will influence the culture of the workplace with their expectations of what the working environment should be. In the future, the culture of many organisations will be highly influenced by the fourth industrial revolution, and this will compel businesses and industries to align with the revolution and to use opportunities presented by artificial intelligence and robotics (Kehoe, 2018). Millennials adapt easily to any working environment; this encourages making it beneficial to organisations to transition into a workplace culture driven by the fourth industrial revolution (Goode, Hegarty & Levy, 2018). The future of work, influenced by rapid technological advances, will need skills, knowledge and abilities vital to developing innovative and agile workplace cultures (Mashile & Ndlovu, 2021). The disruption that will be caused by the fourth industrial revolution will be the driving force for organisations to reassess their workplace culture and to adapt to the changes presented by rapid technological advances (Katarzyna & Robert, 2020). In order to integrate millennials into the workplace, leaders must understand what millennials require from an organisation, which will translate into the culture of the organisation (Heilyn, Jorgensen & Molbjerg, 2018).

3.5. Integrating Millennials into the Workplace

A generation emerges based on characteristics which make it unique and significant when compared to previous generations (Catano & Hines, 2016). The millennial generation has a particular skill set which is highly influenced by technology and it will in the future make a profound impact in organisations (Nolan, 2015). Organisations must prepare the working environment for millennials, who are known to be technologically savvy, with exposure to progressive education compared to previous generations (Snow, 2019). Over the years millennials have entered the job market and have been described as the generation that was born into the emergence of the fourth industrial revolution; hence their dependence on the internet and technology (Bright, 2010). Millennials face the challenge of entering into workplaces in which there are vast differences between them and the older generation, which has created unfounded assumptions regarding millennials (Snow, 2011). These differences between the two generations hinder an organisation's ability to prepare the organisation for the skills sets required in the future (Iyer, Eastman, Monteiro, Rottier & Zokarkar, 2016). The differences arise because of a lack of understanding of each other's attributes and preferences (Krell,

2017). Hence, this study seeks to explore the differences between the two generations which can be used to create a cohesive working environment. An organisation must adopt a leadership style that will assist it to better understand the differences between millennials and the older generation in order to successfully integrate millennials into the workplace (Beaudion & Hong, 2021). Millennials require a leadership style that is inclusive, collaborative and authentic (Paulience & Sedneva, 2019). Leaders are individuals who possess the ability to have open and honest conversations with their followers regarding diverse issues and to generate solutions that will lead to diverse views being incorporated into the organisation (Duffet & Wakeham, 2019). It follows that leadership must be utilised to effectively integrate millennials into the workplace. It has been found that millennials are appreciative of organisations that are open to listen to diverse views which will assist them to move towards an innovative workplace (Dwivedi & Lewis, 2021). Leaders have been described by Agovino (2021) as individuals who are able quickly to gain the trust of their subordinates and create positive emotions amongst their subordinates, thus creating a culture that is innovative. It has been established that millennials make up the largest sector of the workforce in most organisations, and this puts pressure on them to develop strategies to integrate millennials into the workplace (Mayerova & Hyzova, 2020). The challenge with millennials is that they join organisations that expect them to function like adults with the ability to manage the demands of the workplace, whereas millennials expect to be nurtured by their leaders – this raises the need for a different leadership approach (Watts, Laska & Larson, 2016). Millennials are the generation that was raised by the baby boomers and they were given the opportunity to express themselves freely and enjoy being liberal (Wood, 2019).

Millennials are accustomed to being consulted at home, and will therefore be more inclined to relate to leaders who consult them to get their views in the workplace (Duffet, 2021). This may pose a challenge for some leaders who are baby boomers and may be more conservative in their approach when leading the younger generation (Culiberg & Mihelic, 2016). Millennials are different from baby boomers pertaining to their work preferences, values, reasoning and attitudes (Watts, Laska & Larson, 2016). Some leaders have described millennials as the ‘Me, Me, Me Generation’ -- persons who are self-centred, entitled and loaf in the workplace (Austin, 2017). As has been mentioned, baby boomers who are the leaders in organisations are vastly different from millennials (Bathini, 2018), who require an organisation to adopt a leadership style that builds trust and creates an understanding of millennials throughout the organisation (Banwany, 2017). Organisations must adopt strategies which are technology driven to attract and retain millennials in the workplace (Alade, Windapo & Wachira-Towey, 2021). Leaders should be at the forefront of building relationships that are based on trust between leader and employees, thus producing a workforce that is engaged (Reaburn,

Samad, Davis & Ahmed, 2015). Leadership has been described by Kayaalp, Page & Gumus (2021) as a process that creates organisational commitment and engagement which is needed for the integration of millennials and the fourth industrial revolution. This type of leadership is required in organisations today since millennials have different expectations of their employer to previous generations (Ferry & Guthey, 2021). Millennials seek quality education through training and development, they expect collaboration from their superiors, and they desire leaders who do not lead through the typical superior-subordinate relationship (Oberer & Erkollar, 2018).

3.6. Understanding the Fourth Industrial Revolution

The fourth industrial revolution was preceded by the first, second and third industrial revolutions, with its uniqueness being the emergence of advanced technologies (Caudill, 2020). The first industrial revolution began in the 1760s and encompassed the period during which there was a transition from manual to mechanised work through the use of water and steam power (Monohan, 2017). The second industrial revolution began in the latter part of the 19th century and saw the growth of the steel and oil industries. The third industrial revolution, which began in the 1950s, was characterised by the emergence of digital technology and witnessed the domination of technology in industries. This led to the fourth industrial revolution that evolved in early 2010 (Gartner, 2018). Industry Week (2016) describes the fourth industrial revolution as a robust intra-generational revolution which will bring about great opportunities for and challenges to ordinary businesses. South Africa must prepare to take advantage of the opportunities presented by the fourth industrial revolution to create innovation in industries which contribute to the growth of the economy (Marivate, Aghoghovwa, Mahomed-Asmail & Steenhuisen, 2020). The fourth industrial revolution will bring positive changes in the economy, it will force the government to consider relooking at the policy framework in South Africa to align it with the rest of the world (Bittner, 2019). This revolution has been described as the revolution that introduced the Internet of Things and digital enhancement that will change how businesses operate and the type of skills required for the future. The fourth industrial revolution is described as the emergence of a digital tsunami that will change global economies and contribute to ground-breaking renewal of business models (Celaschi, 2017).

The fourth industrial revolution is viewed by many as an industry enabler because it will produce efficiency in delivering a variety of day-to-day technological solutions, such as quicker communication tools (Nsakanda, 2021). In a few years from now most organisations will find themselves confronted with the challenge of training employees for new skill sets arising from the rapid changes introduced by technological advances (Guban & Kovacs, 2021). Research has found that by the year 2020, the fourth industrial revolution was anticipated to stimulate an accelerated pace of change in our personal and work life (Regio, Martins, Malvete, Manuel, Morgado & Afonso,

2016). This is further supported by Vuong & Mansori (2021) who found that the fourth industrial revolution will increase the number of people who are dependent on the use of technology and will accordingly compel organisations to adopt new business strategies to remain sustainable and competitive. Zulu, Pretorius & Van der Lingen (2021) assert that the emergence of the fourth industrial revolution will provide organisations with technological solutions which will not limit business operations to geographical location; hence creating the need for a different set of skills amongst employees. The European Union has identified the emergence of the fourth industrial revolution in developed countries as a trigger for transformation of organisations (Kuruczeki, Pelle, Laczi & Fekete, 2016). The rapid increase in demand for the use of technology presents a skills mismatch which compels organisations to prepare employees for the type of skills that will be needed in the future (Ossiannilsson, 2018). The fourth industrial revolution has been described as the revolution that is going to be the driving force behind the move by organisations to integrate innovative technologies to attract young people into the business world (Wilson, Kandege & Edjoukou, 2021). The alignment of the youth to the fourth industrial revolution brings about new capabilities and skills needed for the future which will benefit economies and contribute to the evolution of new technologies in organisations (Shamim, Shuang, Hongnian & Yun, 2017). The fourth industrial revolution has gained momentum globally and its rapid growth has challenged businesses to become more innovation with the use of technology (Schiolin, 2020).

The fourth industrial revolution will not only bring about technological advances, but it will also challenge employees in the workplace to find new solutions to old problems (Schwab, 2017). The fourth industrial revolution has been described as the revolution that has promised to assure the increased potential of many organisations (Ang, Alan, Goh, Saldivar & Li, 2017). The revolution has disrupted and accelerated the way that organisations operate, so bringing great success to organisations that have been prepared to embrace the revolution (Salter, 2017). This is supported by research done by Lehmacher (2017) who noted that the fourth industrial revolution brings disruptions to organisations which are unavoidable because of the radical pace at which technology drives the drastic changes that organisations must adopt to remain operational. Organisations have had to adopt strategies that enhance innovation to remain sustainable and relevant with the rest of the world. The advances in technology have put pressure on organisations to adapt to the changes of the fourth industrial revolution. Organisations need to educate themselves on the origin of the fourth industrial revolution and the impact that technology has in the workplace (Albert, 2017). In order to understand the changes and implications of the fourth industrial revolution, business leaders need to revisit the previous three revolutions (Fouda, 2020). Organisations have to adopt strategies that are agile, flexible and innovative to cope with the consequences of the emergence of the fourth industrial

revolution (Salter, 2017). The fourth industrial revolution has the potential to yield increased income levels and to transform the working environment; the biggest challenge that most organisations face is to find talent that is able to adapt to the external and internal forces that require the workplace to produce sustainable innovative strategies (Ruel, Rowlands & Njoku, 2021). Hence, organisations require leaders who have foresight, have the ability to think out of the box and are able to keep up with an ever-changing business world (Mayer & Oosthuizen, 2019). Organisations need leaders who are competent to lead the younger workforce which will be required to generate ideas that are essential for them to remain competitive and sustainable by keeping up with the rapid changes brought about by the fourth industrial revolution (Mayer, 2020). The fourth industrial revolution has disrupted industries, and this has resulted in the highest unemployment rate ever experienced in South Africa and in turn led to a huge percentage of citizens not being able to actively participate in the economy, thus having a deleterious effect on numerous industries (Van Schalkwyk, 2021). In South Africa the disruption of the fourth industrial revolution has impacted various industries, such as manufacturing, telecommunications, banking and the retail industry, and this has led to retrenchments (Bittner, 2019). In addition, the fourth industrial revolution has led to the loss of jobs in the public sector as a result of redundancy (Sony, Antony & Douglas, 2020). It is argued that whilst the fourth industrial revolution brings with it great competitive advantage, this places a burden on businesses to transform and adapt at a rapid pace.

This is evident in some sectors in South Africa that have been forced to retrench a large number of employees because the rapid changes in technology have required organisations to develop the efficient technological solutions required by consumers. Multichoice in South Africa was compelled to retrench close to 2 194 employees because of evolving digital platforms – in the past consumers made use of telephones and walk-in services to contact Multichoice as a service provider; however, the introduction of digital services using smart phones saw a decline in the use of walk-in centres by consumers. Thus, consumers' change in attitude to the utilisation of technology disrupted this industry and forced it to embrace the fourth industrial revolution (Teagarden, 2021). The fourth industrial revolution has disrupted many industries and has introduced the use of smart phones to access products and services. Therefore, organisations are constantly required to improve their technological services as quickly as possible in order to compete in their sectors, and this has threatened job security. The fourth industrial revolution is a revolution which is focused on the use of cyber physical systems, smart factories and service innovations (Ofori & Spong, 2020). The fourth industrial revolution emerged after the third industrial revolution which was more focused on mechanisation, high electric energy and the use of automation and electronics (Webster, 2020).

3.7. Opportunities and Threats of the Fourth Industrial Revolution

The fourth industrial revolution has transformed most countries globally through digitalisation, although some are far ahead of others (Jung, 2020). The Internet of Things (IoT) has advanced mobility in numerous countries, thus galvanising governments and businesses around the world to align to the opportunities of the fourth industrial revolution (Mpungose, 2020). The fourth industrial revolution is categorised by the following (Schwab, 2019):

- advancements in computing technologies
- block chain technologies
- the internet of things
- artificial intelligence and robotics
- advanced materials
- additive manufacturing and multidimensional printing
- biotechnologies
- neurotechnologies
- virtual and augmented realities
- energy capture
- storage and transmission
- geoengineering
- space technologies.

The fourth industrial revolution empowers businesses and society to provide modernised products and services for a better future aligned to the global shift towards the use of advanced technology (Philbeck & Davis, 2019). The technologies of this revolution have improved the way people move, live, think and plan, which has been spread across cities through the dominant use of smartphones, sensors and internet connectivity (Chiles, Broad, Gagnon, Negowetti, Glenna, Griffin, Tami-Barrera, Baker & Beck, 2021). The fourth industrial revolution has not only disrupted industries, but has also disrupted the future of work with the introduction of artificial intelligence and robotics (Park, Yoon, Byungun, Kim & Seol, 2021). The fourth industrial revolution has challenged businesses in developing countries to become more innovative, resulting in the creation of more job opportunities that are required for such businesses to operate efficiently (Prince, Saven & Swanson, 2021). Research conducted by the World Economic Forum (2019) predicted that in the year 2020 there would be a specific skill set required for future jobs which would lead to other jobs becoming

redundant. The introduction of artificial intelligence and robotics to replace humans will result in the decimation of jobs performed by humans (Llale, Root & Wembe, 2020). Artificial intelligence is rapidly reshaping how tasks are performed; whilst this is a great opportunity for innovation, it is a major threat to human jobs (Allen & Fukami, 2022). The use of artificial intelligence has the potential of obliterating existing jobs and also of creating new jobs. A new generation of smart machines will modify the policies and procedures that govern employment (Lee, Wong & Intarakumnerd, 2020), and will be capable of performing a variety of task that cannot be performed by humans (Ozkazanc-Pan, 2021). Because the fourth industrial revolution will accelerate the use of artificial intelligence in most industries, this poses a threat to municipalities in South Africa that employ individuals who utilise manual systems to conduct day-to-day operations (Kraft, Sajtos & Haenlein, 2020). Artificial intelligence is defined as the ability of a system to interpret external data accurately, to learn and develop from that data, and to achieve precise tasks and responsibilities through applying flexibility (Haenlein & Kaplan, 2019). It is also known as machine learning, an era for computer science to create machines that are intelligent and work like humans (Schlogl, Weiss & Prainsack, 2021). Artificial intelligence, also known as AI, will propel the advancement of the fourth industrial revolution by 2030 since it is predicted to eliminate certain types of full-time employment. The fourth industrial revolution through the use of artificial intelligence and robotics will launch hybrid jobs, which will require employees to be multi-skilled (Kudyba, 2020).

Although leaders in organisations have to prepare for the fourth industrial revolution, they should not be afraid of it, as it will transform humanity (De Bruyn, Viswanathan, Beh, Brock & Von Wangenheim, 2020). Despite the fact that technological advancements will increase the threat of cyber security in organisations which will affect the security of data, they will also create employment in the cyber security market (Kudyba, 2020). The fourth industrial revolution will also pose a threat to social interaction because improved technology will lead to a reduction in human interaction (Kudyba, 2020). Organisations must recognise that millennials are at the centre of this technological era and that they are best placed to enable their organisations to manage the robust initiatives of the revolution (Tumlin, Liu & Park, 2021). The older generation may not have the drive required by these rapid technological advancements, thus requiring organisations to empower the younger generation (Taborri, Pasinetti, Cardinali, Perroni & Rossi, 2021). For instance, in the beverage industry, a global brand such as Coca Cola has embraced the fourth industrial revolution by employing a younger generation that interfaces more with consumers through the use of the internet and data systems in a manner that creates better efficiencies (Chao, Pai & Xun, 2021). The arrival of the fourth industrial revolution requires organisations to invest in the younger generation to develop skills relevant for the future (Tumlin, Liu & Park, 2021). Governments must work

together and learn from each other in order to prepare the public sector for these technological advancements, which cannot be ignored because of their threat to economies and their impact on people's lives (Allen & Fukami, 2022).

3.8. The Impact of the Fourth Industrial Revolution in the Public Sector

The public sector in all countries has the responsibility to ensure that the citizens live in a country that is prosperous and affords them an opportunity to live a sustainable life. In most countries the public sector has the responsibility to create employment to boost the country's economy through an economically active population (Avis, 2018). This creates a burden on the government to create job opportunities that are sustainable and to provide security to the people (Dean & Spoehr, 2018). In the light of the above, the fourth industrial revolution has placed enormous pressure on governments to engage with other governments to manage the rapid advancements in technology which threaten their economies and their ability to create sustainable jobs (Mahomed & Smith, 2019). In developing countries such as South Africa, the challenge is even greater because the government was not prepared for these rapid technological advancements and their effect on global competition (Ichikowitz, 2017). Research has found that in countries such as South Africa, which already face the challenge of high unemployment, the problem is exacerbated by the shedding of jobs due to the fourth industrial revolution (Gavrilova & Gurvits-Suits, 2020). The local government sphere needs to move faster in embracing the fourth industrial revolution to ensure that government departments become more efficient in their processes and services (Huang, Rust & Maksimovic, 2019). The fourth industrial revolution has evolved rapidly and robustly, and economies such as the South African one were ill-prepared for its impact, especially in the local government sphere where services must be delivered with speed and efficiency (Ayentimi & Burgess, 2019). In South Africa, the fourth industrial revolution has disturbed many industries that in turn have put pressure on government to embrace the fourth industrial revolution (Brodny & Tutak, 2021).

The national governments in Africa are re-evaluating and strategising on how they can align to the fourth industrial revolution in order to provide services to the public more efficiently and quicker (Kudyba, 2020). The public sector is the largest employer in South Africa, hence the advancement of technology poses a threat to the many public sector jobs that are performed manually which are able to be completed much quicker using automation whilst increasing productivity (Schlogl, Weiss & Prainsack, 2021). This will place a burden on government to re-assess current skills and how employees can be re-skilled to safeguard jobs (Turner & Zaichenko, 2018). Therefore, some departments have taken a stance to devise new strategies that are aligned to the fourth industrial revolution (Hartmann & Hattingh, 2018). The public sector, including municipalities, must use the opportunities of the fourth industrial revolution to provide efficient services to the public (Opaneye,

2020). The newly formed Department of Communications and Digital Technologies has branded itself as the department to champion the opportunities provided by the fourth industrial revolution (Swart, 2018). The public sector in all spheres can create new job opportunities in departments and municipalities whilst re-skilling the country to champion projects inspired by technological advancements (Ferry & Guthey, 2021). In the public sector, functions such as health services, tourism, information technology, water services, and telecommunications can be enhanced if government promotes strategies that seek to find new solutions to problems whilst boosting economic growth (Houngbo, Coleman, Zweckhorst, De Cock Buning, Medenou & Bunders, 2017). The public sector will be successful in implementing strategies to manage technological advancements if its leaders are developed to deal with these changes (Illankoon & Tretten, 2021). The fourth industrial revolution requires a different leadership perspective for organisations in the public and private sectors (Tumlin, Liu & Park, 2021). Hence, this study will explore the role that can be played by leadership in integrating the fourth industrial revolution into the workplace.

3.9. The Future of Work with the Introduction of Artificial Intelligence

The field of artificial intelligence was founded at a gathering in 1956 at the Dartmouth Summer Research Project on Artificial Intelligence (Liengpunsakul, 2021). The advancement of the fourth industrial revolution in the last decade has launched artificial intelligence as a powerful instrument to improve the availability of big data, higher computing power and an advancement in mathematical algorithms (Mousavi, Amiri & Seyed, 2021). Artificial intelligence is defined as the development of systems or machines that have the ability to sense, understand, perform and learn (Brodny & Tutak, 2021). The development of artificial intelligence is categorised into four elements: (a) think like humans, (b) think rationally, (c) act like human beings, and (d) act rationally (Liengpunsakul, 2021). The main objective of artificial intelligence is learning machines created from mathematical algorithms which are developed from learning data (Taborri, Pasinetti, Cardinal, Perroni & Rossi, 2021). In many countries artificial intelligence has revolutionised industries through the introduction of robotics to produce products and services (Vakratsas & Wang, 2021). In the future organisations will utilise artificial intelligence to solve problems related to human intelligence (Chao, Pai & Xun, 2021). The use of artificial intelligence will accelerate the introduction of robotics in many industries, disrupting the future of jobs (Castelo, Maarten & Donald, 2019). The fourth industrial revolution will depend on artificial intelligence to supplement the implementation of robotics in the workplace, and this will lead to job losses (Burton, Stein & Jensen, 2020).

The introduction of robotics into the workplace will compel organisations to reassess the working environment in order to create a synergy between humans and robots (Brodny & Tutak, 2021). However, Jiang & Cheng (2021) argue that the coexistence of humans and robotics in the workplace

may lead to resistance which will result in industrial action. Lloyd & Payne (2019) support the view that organisations must consider the extent to which employees might resist a working environment inclusive of robotics since it will threaten their livelihoods. It is therefore imperative that leaders in organisations prepare employees and the working environment for the integration of robotics. The fourth industrial revolution will be crucial for the public sector to promote the use of artificial intelligence to enhance service delivery (Kaivo-oja, Roth & Westerlund, 2017). In developing countries, the fourth industrial revolution has not kicked off and most organisations in those countries have a strong presence of trade unions which may resist the introduction of robotics in the workplace (Cooper, 2019). Artificial intelligence is still regarded in developing countries as science fiction; however, developed countries have forged ahead and are globally competitive in a variety of industries through the use of robotics (Puntoni, Reczek, Giesler & Botti, 2021). Organisations in the public sector must face the reality that the world has evolved and may have to consider the use of artificial intelligence to deliver services as well as creating employment opportunities (Belk, Humayun & Gopaldas, 2020). In South Africa, the public sector is not prepared for the fourth industrial revolution and is definitely not ready for the initiation of artificial intelligence (Mpungose, 2020). The process of introducing artificial intelligence to the workplace will require leaders to assess the attitudes and personalities of their employees to enable them to plan for the ramifications of integrating robotics (Hayes, Britt, Evans, Rush, Towery & Adamson, 2021).

Leaders will be required to reassess employment policies to successfully integrate artificial intelligence to ensure equality in the workplace (Ferry & Guthey, 2021). The changes that will be brought by the fourth industrial revolution will require leaders who are skilled in technology and not only business administration (Schwab, 2017). The expectation and skills of leaders who will lead organisations in the artificial intelligence era must be adaptable and be able to respond to rapid changes in the market (Jung, 2020). Jiang & Cheng (2021) hold the different view that leaders have the ability to transform and develop themselves to be ready to manage the demands of the fourth industrial revolution. In countries such as South Africa it is important to assess their readiness to integrate and take advantage of the fourth industrial revolution compared to the international community.

3.10. An International Perspective on the Fourth Industrial Revolution

The use of artificial intelligence to provide advanced products and services is predominant in the international community. The World Economic Forum (2020) implores developed and developing countries to discover new ways to produce products and services through the optimisation of the fourth industrial revolution. In the future artificial intelligence will take over in many industries in developed countries to accelerate the use of digital services (Vuong & Mansori, 2021). The

emergence of artificial intelligence around the world will propel countries to develop new business models (Schiolin, 2020). The world is moving into unprecedented times and requires countries to produce rapid and radical technological solutions to respond to market supply and demand (Allen & Fukami, 2022). The utilisation of the fourth industrial revolution through the use of robotics will emerge significantly in the manufacturing, ecommerce and telecommunications sectors in many countries (Agovino, 2021). Hessary, Vakeel, Burke & Fuduric (2019) hold the contrary view that many organisations will not take advantage of the fourth industrial revolution to allow for a transition to artificial intelligence because of economic and societal conditions (Kozinets & Gretzel, 2021). The United Nations has encouraged its member countries to utilise the fourth industrial revolution to transition in digitalisation to disrupt current systems that are not aligned to the future of world trade (Kumar, Rawat, Mohd & Husain, 2021). The World Economic Forum (2021) asserts that countries require leaders in organisation who have unique managerial skills to manage the rapid advancement of the fourth industrial revolution and the disruption it will cause on the markets across the world. The Chinese government is positioning itself to become the global leader in artificial intelligence (Liengpunsakul, 2021).

The Oxford Insights Government AI Readiness Index 2019 conducted a study in 193 countries to assess the readiness of countries to utilise artificial intelligence in their industries and in the public sector (Oxford Insights, 2019). The study divided the world into seven regions, including Africa, Asia-Pacific, Australia and New Zealand, Eastern Europe, Latin America and the Caribbean, North America and Western Europe (Chung & Chung, 2021). The study found that developed countries such as Singapore, the United Kingdom, Germany, the United States, Finland, China and Japan were among the best performing countries in their preparation for the utilisation of artificial intelligence (Liengpunsakul, 2021). Africa is among the least prepared regions to utilise the fourth industrial revolution through the use of artificial intelligence (Liengpunsakul, 2021). The African continent is not in a position to compete globally in relation to the fourth industrial revolution and is not making an effort to use rapid technological change to be at the forefront of global competitiveness (Shamim, Shuang, Hongnian & Yun, 2017). The slow pace adopted by South Africa in utilising the opportunities of the fourth industrial revolution will make it difficult for businesses in South Africa to compete internationally and produce an efficient public sector (Jacobs & Pretorius, 2020). The implementation of emerging technologies in developing countries such as South Africa has failed because the government has not been at the forefront of promoting technological transformation to achieve the desired creation of value required by businesses (Oosthuizen & Mayer, 2019). The South African government has adopted a reactive stance which is not conducive to it embracing the era of the fourth industrial revolution (Marivate, Aghoghovwia, Ismail, Mahomed-Asmail & Steenhuisen,

2020). It is projected that the world will have 163 trillion gigabytes of data by the year 2025 which requires countries to move towards building trusted and credible communication infrastructure (Agovino, 2021). Jacobs & Pretorius (2020) argue that South Africa and other African countries have become spectators in the utilisation of the fourth industrial revolution due to the threat of cyber-crimes. The full integration of the fourth industrial revolution will require a different leadership approach in South Africa (Nxumalo & Nxumalo, 2021).

3.11. The Differences in Leadership between African, Western and European Methods

In the business context, individuals who occupy positions that provide strategic direction, have decisionmaking power and mentor or have influence over others are defined as leaders (Koenane, 2018). Therefore, the primary function of a leader is to ensure that the organisation operates at its optimum taking into consideration the leadership style that the leader utilises to ensure that all employees are part of the vision of the organisation (Martino, D'Onza & Melville, 2020). This study explores how the municipality can effectively integrate millennials and the fourth industrial revolution which needs individuals in leadership positions to lead others. In most organisations, an expectation is automatically created that individuals in leadership positions are able to lead others effectively; however, this is not a reality because an individual's personal perspective on leadership and their own life experiences influence how they lead others (Ngayo Fotso, 2021). Leadership in the 21st century has evolved particularly with the introduction of the fourth industrial revolution (Malakyan, 2019). The skills, competencies and attributes required for the digital era are substantially different from those required earlier, and this will have an impact on the various leadership models that are currently in existence (Goller, Caruso & Harteis, 2021). Hence, it is important to provide a background of leadership as a theory and the benefits of leadership in order to create greater efficiency for organisations that are evolving rapidly.

Leadership is practised globally and has different contexts in different countries which influences the behaviour of leaders in the workplace (Heaton, Schoemaker & Teece, 2018). African, Western and European countries have different approaches to leadership which are influenced by the cultural values applicable in a country/state (Murrell, Blake-Beard & Porter, 2021). Some have critiqued the relevance of existing leadership approaches in the digital era, which requires a different skill set (Onukwuba, 2020). The introduction of smart technologies has changed the concept of leadership in that leaders are required to keep abreast with the latest trends in technology and the impact that advanced technologies have on their leadership style (Ngayo Fotso, 2021). In developed countries, the responsibility of leaders has shifted from attracting followership to adaptability, particularly in this digital era (Munby, 2020). Leadership has to evolve to develop strategies to combat daily changes influenced by the fourth industrial revolution. Hence, most organisations are in the process

of re-inventing themselves and reviewing business models to align to a future influenced by ever-changing advanced technologies (Du Plessis & Nkambule, 2020). A leader required to lead in the 21st century must have energy, innovation and the ability to visualise practically a future in the fifth industrial revolution and beyond (Lues, 2021). A leader in the current digital era must be versatile and must use a diverse leadership style to lead effectively to drive the fourth industrial revolution (Dwivedi, & Joshi, 2021). The background on the differences in leadership approaches in Africa, the West and Europe are explored further to demonstrate how leadership has evolved over the years.

3.11.1. The Western-American Method

The worldwide view of the Western-American approach relates to an individual hero, who utilises his independence, confidence and nobility for the betterment of communities and organisations as part of social responsibility (Lituchy & Punnett, 2014). Prominence is given to the individual who shares the view that ‘I am because I, the individual hero, dream and do’ (Perrone & Tucker, 2019). Hence, the leader focuses on their own well-being which may not be beneficial to society and serving others. Primarily it is important for the leader to focus on attending to their own interests (Dalglish, Du Plessis, Lues, Pietersen, Ngunjiri, Kablan & Van Zyl, 2016). The character of a Western-American leadership approach may not be appropriate in the digital era because leaders are required to collaborate with others to find practical solutions to the challenges presented by the fourth industrial revolution (Day, Riggio, Tan & Conger, 2021). The responsibility of leaders has evolved from a self-serving attitude to a transformational and servant approach which is less self-serving and focuses on a shared goal within an organisation (Gandolfi & Jeyaraj, 2019).

3.11.2. The European Method

The European leadership model is founded on leaders who tend to be over-confident and view themselves from an individual perspective (Moore, 2021). The European worldview assigns emphasis to rational and scientific thinking (Lituchy & Punnett, 2014). This method adopts a philosophy amongst leaders that believes in ‘I am because I think I am’. Therefore, leaders in the European worldview display sound expertise in the disciplines of planning, scientific and technical environments. These leaders utilise formal systems which incorporate using their authority and power to lead others. The European method of leadership is still widely practised in organisations in the 21st century and is deemed effective based on the continuous renewal of the leaders’ ability to adapt quickly to internal and external factors such as rapid technological advances (Day, Riggio, Tan & Conger, 2021).

3.11.3. The African Method

The African worldview gives emphasis to people and their dignity which they believe are of the highest significance. The ultimate focus is on collective brotherhood of mankind, known as ubuntu (Naude, 2019). Tavernaro-Haidarian (2020) describes ubuntu as a philosophy that replicates the narrative of ‘I am because we are; I can only be a person through others’. The concept of ubuntu in South Africa particularly no longer has significance in society based on the manner in which societies treat and embrace each other (Koenane, 2018). Juharyanto & Imron (2021) hold the contrary view that ubuntu is still relevant and significant both internationally and in African countries to promote togetherness and collaboration. The needs of others, such as communities, are deemed to be more important than the needs of the individual. Contrary to the Western-American method, the African method encourages individuals to prioritise society and stakeholders to the best of their ability, and only thereafter to fulfil their personal goals. The principle of ubuntu has a significant impact on building relationships among leaders and developing leaders to lead with compassion (Woermann & Engelbrecht, 2017). A leader who practices the concept of ubuntu in the 21st century can relate better to both millennials and the older generation because ubuntu is aligned to serving others (Ivanko, 2019). This leadership approach may not be effective in the digital era that requires leaders to make decisions that may be in conflict with an individual’s personal view on leadership (Samuel & Durning, 2021).

3.12. Leadership Theory and Research

The most effective way to classify leadership theory and research information is to discuss the various types of variables which are more prominent in the field of leadership as a study (Yukl, 2013). The three types of variables identified to understand leadership are (1) characteristics of leaders, (2) characteristics of followers, and (3) characteristics of the situation. The table below depicts the key variables within each category.

Table 3.3: Key Variables in Leadership Theories

Characteristics of the leader

- Traits (motives, personality)
- Values, integrity, and moral development
- Confidence and optimism
- Skills and expertise
- Leadership behaviour

- Influence tactics
- Attributions about followers
- Mental models (beliefs and assumptions)

Characteristics of the followers

- Traits (needs, values, self-concepts)
- Confidence and optimism
- Skills and expertise
- Attributions about the leader
- Identification with the leader
- Task commitment and effort
- Satisfaction with job and leader
- Cooperation and mutual trust

Characteristics of the situation

- Type of organisational unit
- Size of organisational unit
- Position power and authority of leader
- Task structure and complexity
- Organisational culture
- Environmental uncertainty and change
- External dependencies and constraints
- National cultural values.

Source: Yukl (2012:27).

3.13. Leadership Theories

Leadership theories over the years have emphasised one category over the others and have used it as the basis for explaining effective leadership; however, over the past half-century leadership characteristics have been emphasised in research on effective leadership which has led to the trait theory becoming popular in the study of leadership theories. Leadership as a study can be dated back to the Western industrial revolution which took place from the end of the nineteenth century and has evolved over the years and gained momentum (Nahavandi, 2016). Scholars in the leadership field have used scientific methods to comprehend and predict the effectiveness of leadership by

identifying and measuring characteristics of leaders (Nahavandi, 2016). Therefore, the scientific approach can be divided into three general eras, namely the trait era, the behaviour era and the contingency era (Cavey, 2020). These eras have contributed tremendously to the understanding of leadership (Johnson, 2020). A number of leadership theories were developed to establish whether the relationship that exists between leaders and followers yields positive results (Korman & Tanofsky, 1975). There are four periods in the advancement of leadership theory, namely the theory of traits, the theory of behaviour, contingency theory and new approaches to leadership (Gumusay, 2019). The leadership theories have primarily focused on an individual becoming an efficient leader and less emphasis was placed on effective leadership (Olley, 2021). The new theories that have been developed recognise the continuous improvement of the abilities of a leader based on the feedback the leader receives from followers; this is distinct from conventional leadership theories which concentrated on the relationship between the leader and their followers (Nunes, Da Cruz & Pinheiro, 2011). Leadership is said to be multifaceted, consisting of various meanings and characteristics (Liang, Sendjaya & Abeyssekera, 2021). Therefore, several leadership theories were developed to distinguish the different personality traits combined in leadership styles (Carswell, 2021). This section explores pertinent leadership theories relating to the concepts used to describe work preferences and attributes of millennials and the fourth industrial revolution.

Having discussed theory pertaining to millennials and the fourth industrial revolution, an inference can be drawn that the qualities needed to lead the changes that have surfaced in organisations have changed and a different leadership approach is required. It appears that the emergence of the fourth industrial revolution and millennials requires a different leadership approach; hence, the theories selected in this study have been identified for their explicit definition of the relationship that exists between leaders and followers. Leadership theories endeavour to differentiate between effective and ineffective leaders (Dunn, 2021). Effective leadership is regarded as one of the most significant mechanisms crucial to the attainment of success in an organisation (Landis, Hill & Harvey, 2014).

3.13.1. Trait Theory

The trait theory was established in the early 20th century – it is known as the great man theory and is reliant on an individual's birth right (Kessler, 2021). The great man theory was developed by Luria, Kahana, Goldenberg & Noam (2019) who held the view that leaders were born at distinctive times with their peculiar traits and grew into leaders in their societies. Another popular prevalent aspect of the trait theory was the notion that individuals who were born into the upper class were biologically superior to others (Wyatt & Silvester, 2018). Derue, Nahrgang, Wellman & Humphrey (2011) asserted that characteristics vary between leaders and non-leaders based on whether leadership traits are learned or inherited. Colbert, Judge, Choi & Wang (2012) further said that the success of a leader

is dependent on evident core traits which distinguish a leader from a non-leader. The trait theory focused mainly on identifying traits that differentiated a leader from a non-leader (Kessler, 2021). Contrary to this Gehring (2007) asserts that leadership theories have evolved to measure a leader's ability based on how they process information and their personality. Leaders can be nurtured since they are required to develop other skills that are instrumental to leading their organisations into the future without limiting them to certain traits (Yukl, 2013). Traits must be combined with other skills for an individual to be an effective leader rather than portraying traits in isolation (Wyatt & Silvester, 2018). Traits are no longer deemed as important as they were many years ago, given that societies and organisations have evolved, influenced by various factors which require a leader to be agile and solutions driven (Hussain & Hassan, 2015). Therefore, it appears that the emergence of millennials and the fourth industrial revolution cannot be limited to a leader's traits in a world that is changing rapidly. The leaders of the municipality may require a new set of skills to learn innovative ways of understanding the new generation of employees and to keep up with the changes that affect the organisation.

This new set of skills may be acquired through training and development interventions. The new leadership theories must take into consideration a leader's responsiveness to situations, their intellectual ability, personality and innovation to expose the effectiveness of their leadership style (Cerni, Curtis & Colmar, 2014). Although traits played a significant role in identifying leaders in previous years, it appears that, as societies and organisations evolve, leaders must be willing to grow and adapt to the changes. Nahavandi (2015) argues that the theory should take into consideration the behaviour of an effective leader, which has several advantages compared to the trait theory. These are:

- Behaviours can be observed readily.
- Behaviours can be consistently measured.
- Behaviours can be taught through a variety of methods.

3.13.2. Contingency Theory

The contingency theory was developed in 1967 by Fielder, who focused mainly on the behaviour or decisions made by a leader in various situations (Fielder, 1967). Fielder's view is supported by Korman (1973) who found that the contingency theory emphasised that a suitable leadership style depended on the environmental situations involved. Fielder (1981) asserted that the reasonableness of the contingency theory could be measured by the behaviours portrayed by leaders in unique situations. Hovey (1974) found that the contingency theory depends on two additional variables; these have been identified based on a leadership style that is task and outcome orientated or people

and relations orientated, and the relationship that exists between the leader and follower is dependent on whether their relations are good or poor. In addition, Hovey (1974) states that the contingency theory forecasts that a leader who is not focused on building good relationships with followers may achieve best results by utilising a task-focused approach, whilst a leader who focuses on building good relationships with followers may be more effective. The contingency theory utilises the differences between an individual's leadership style in relation to tasks and relationships and suggests that the leadership style a leader adopts is situational, which requires the leader to adapt their leadership style to accommodate a situation they come across at a particular time (Mitchell, Biglan, Oncken & Fiedler, 1970). The contingency theory was developed to be utilised in real-life situations; hence it involves a variety of instruments for a leader to employ to resolve complex issues that develop in different situations (Northouse, 2016). This theory of leadership investigates how situational dynamics change the effectiveness of a leader's behaviour and leadership style (Tirmizi, 2002). Fiedler (1978) states that the performance of a group according to the contingency theory is dependent on an individual's leadership style and situations that are positive for the leader. Millennials have been described as the generation that needs to be 'led' by leaders who can adapt quickly to the changes that occur globally which affect their organisation. Hence, the contingency theory is useful in that it acknowledges that there are situations that may require a leader to adopt a new leadership style to deal with a specific task or change that has occurred within the working environment.

Schriesheim & Glinow (1977) emphasised that a leader's behaviour plays a major role in understanding the circumstances relating to the environment and the tasks allocated to subordinates which may affect their job satisfaction. The contingency theory of leadership is relevant to this study in that it displays that individuals can use situational leadership to lead others towards a common goal. Nahavandi (2015) found that this theory suggests the following:

- There is no best way to lead.
- The situation and various relevant contextual factors determine which style or behaviour is most effective.
- People can learn to become good leaders.
- Leadership makes a difference in the effectiveness of groups and organisations.
- Personal and situational characteristics affect leadership effectiveness.

3.13.3. Path-goal Theory

The path-goal theory of leadership suggests that the effectiveness of a leader is portrayed through their behaviour which influences situational and employee characteristics (Mathieu, 1990). The

path-goal theory of leadership was developed by House (1971) who studied how a leader's behaviour impacts on the performance of their subordinates. House & Dessler (1974) assert that the path-goal theory puts a suggestion which is: the leader's ability to boost the psychological condition of subordinates leads to job satisfaction. House & Mitchell (1974) state that the primary function of a leader is to provide clarity on the goals that must be achieved by subordinates, to give direction on the paths that should be explored to achieve those goals and to provide a reward dependent on performance. Greene (1979) argues that characteristics and environmental forces influence the behaviour of a leader in varying situations. Griffin (1979) affirms that a leader's behaviour towards subordinates results in job satisfaction and improved performance from subordinates. Szilagyi & Sims (1974) found that the path-goal theory suggests that a leader's behaviour influences how a task given to subordinates is structured in a way that provides clear direction. Put differently, the relationship between a leader and their subordinates is dependent on the leader's ability to gauge the relationship that exists between the requirements of the task and the needs and capability of subordinates (Borden & Fiedler, 1977). The path-goal theory employs a contingency approach in that the leader has the responsibility to ensure that their subordinates' behaviour is clearly aligned to the task, thus increasing the motivation to complete the task (Daft, 2018). In the light of the above, it appears that the path-goal theory is relevant to this study because millennials have been found to align themselves with a leader who is able to motivate and provide them with direction to complete a task (Johnson, 2015).

3.14. Defining Leadership

Over the year's research on leadership has evolved as a study which concentrates on the impact a particular leadership style practiced by an individual has on a leader's attitudes and the behaviours portrayed to their followers (Arena & Uhl-Bien, 2018). Leadership is multifaceted and has many meanings and merits (Grimm, 2010). Leadership is a complex process that distinguishes a goal, motivates others to perform and provides guidance to followers to accomplish the shared goal (Porter-O'Grady, 2003). Some researchers in the leadership field who have different views on the subject have found that leadership has different meanings to different people (Yukl, 2013). Scholars have interrogated the usefulness of leadership as a scientific construct (Alvesson & Sveningsson, 2003). A majority of behavioural scientists and practitioners appear to believe that leadership is an actual phenomenon important to contribute to the effectiveness of an organisation (Yukl, 2013). Hence, knowledge of leadership as a study has increased and has not shown any signs of decreasing in the years to come. Aleksic, Stanisavljevic & Boskovic (2016) describe leadership as a process by which an individual reflects on and appreciates the impact that they have on their subordinates to fulfil a common goal. Studies have focused primarily on the individual expected to be a leader and

less attention has been given to the fact that leadership consists of two parts - the leader and the follower (Islam, Rehman & Ahmed, 2013). Leadership should be regarded as a two-way interactive process since the leader must influence their followers and followers must also be in a position influence the leader (Stock, Zacharias & Schnellbaecher, 2017). The theory on leadership is crucial to enhance teamwork and motivation among followers through the leader's influence and behaviour (Rahbi, Khalid & Khan, 2017). Nahavandi (2015) found that even with the multitude of definitions of what leadership is, the definitions all share four common elements:

- Leadership is a group and social phenomenon -- a leader cannot exist without followers; it is about leading others.
- Leadership involves interpersonal influence or persuasion. Leaders are responsible for ensuring that others implement goals and actions.
- Leadership is goal directed and action oriented. The leader is influential in ensuring that they play a lively role in groups and organisations to guarantee the achievement of organisational objectives.
- The presence of a leader provides a sense of hierarchy within a team/group. This assures employees that there is someone at the helm to ensure that the organisation is steered in the right direction.

Nahavandi (2016) defines a leader as any individual who has the ability to influence others within an organisation, assists the group/team to create goals, and provides guidance towards the attainment of organisational objectives. DuBrin (2013) developed a framework for understanding leadership and what others require from a leader.

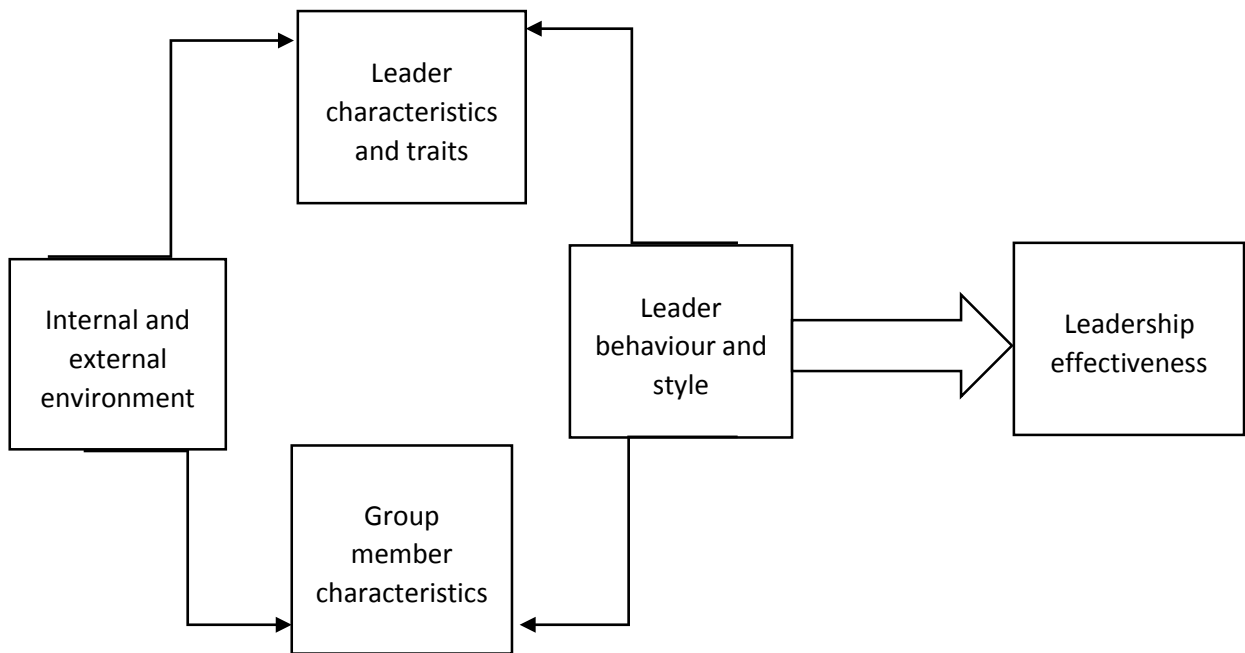


Figure 3.2: A Framework for Understanding Leadership

Source: DuBrin (2013:21).

The framework for understanding leadership aims to incorporate various leadership theories into one allinclusive framework. Leadership as a practice and research topic has been extensively explored by numerous scholars, which has prompted the formation of the framework based on the leadership theories and descriptions of leadership that have been established (DuBrin, 2013). Thus, the framework places emphasis on the variables that have an impact on effective leadership, expressed with a formula which has an insightful meaning to leadership as a study and its impact on followers and the organisation:

$$L = f(l, gm, s).$$

Leadership is a function of the leader, group members (or followers), and other situational variables which form the basis of the leadership process that is expected from a leader. This is supported by research conducted by Bass & Avolio (1990) who found that leadership is a function of both the leader and the people who they lead and the complexity of the environment they are working in. Therefore, leadership must take into account factors connected to the leader, the people being led and the various influences in the environment that the leader is operating in (Bass & Avolio, 1995). Furthermore, the framework describes how leadership can be comprehended by investigating the core variables: leader characteristics and traits, leader behaviour and style, group member characteristics, and internal and external environment. Leadership effectiveness is described as the

ability of a leader to achieve desirable results from their subordinates, namely productivity, quality, and satisfaction in any situation that may arise within the organisation (DuBrin, 2013).

- Leadership characteristics and traits – refers to the inward qualities required from a leader, such as self-confidence and problem-solving skills, to assist the leader to perform efficiently in different situations.
- Leader behaviour and style – refers to the accomplishments that the leader is able to achieve through displaying their approach to guiding others, which influence how effective they are in ensuring that their subordinates achieve their performance targets. This can be achieved through participative leadership where the leader is able to coach and develop their subordinates to ensure continuous improvement.
- Group member characteristics – refers to the attributes of the subordinates who the leader is leading, which influence how effective the leader will be. If a leader is leading a team of subordinates who are dedicated, self-motivated and intelligent, they are likely to assist the leader in achieving excellent performance. However, the effectiveness of the leader will also be measured by their ability to lead subordinates who do not possess attributes that can contribute to the leader's success but still develop a winning team.
- Internal and external environment – refers to various factors within and outside the organisation that could potentially affect how effectively a leader leads their team. An organisation that is culturally diverse would require a leader who possesses multicultural skills to be effective in that environment.

3.14.1. Four Universal Promises of Leadership

In addition to the framework mentioned above, Anderson & Adams (2016) have identified four universal promises of leadership that must be adopted by leaders who provide strategic direction to their organisation to ensure and maintain sustainability and competitiveness. These promises reflect the attributes that are required from leaders in order for them to lead effectively during the era of the fourth industrial revolution and the new generation of employees that is intrinsically aligned to the revolution. The four promises of leadership were developed by Anderson & Adams (2016) through conducting field work with senior leaders in executive positions in various industries. Their research was prompted by the imperative to ensure that leaders who occupy positions that provide direction to others within organisations are developed efficiently to lead those organisations and the persons who work for them. In order to fulfil their leadership roles, leaders must understand what employees expect from them, how to manage their expectations, and most importantly how to deliver on those

expectations. The synergy between the leader and what is expected benefits the organisation through increase in performance and productivity and a workforce that is motivated and engaged, which is essential for an organisational culture that is enjoyable and conducive for employees.

The promises identified as key components that leaders need to adhere to in order to achieve leadership effectiveness are: (1) set the right direction and create meaningful work, (2) engage all stakeholders and hold them accountable for performance, (3) ensure that processes and systems facilitate focus and execution, and (4) lead effectively -- maintain relationships of trust to achieve and sustain desired results.

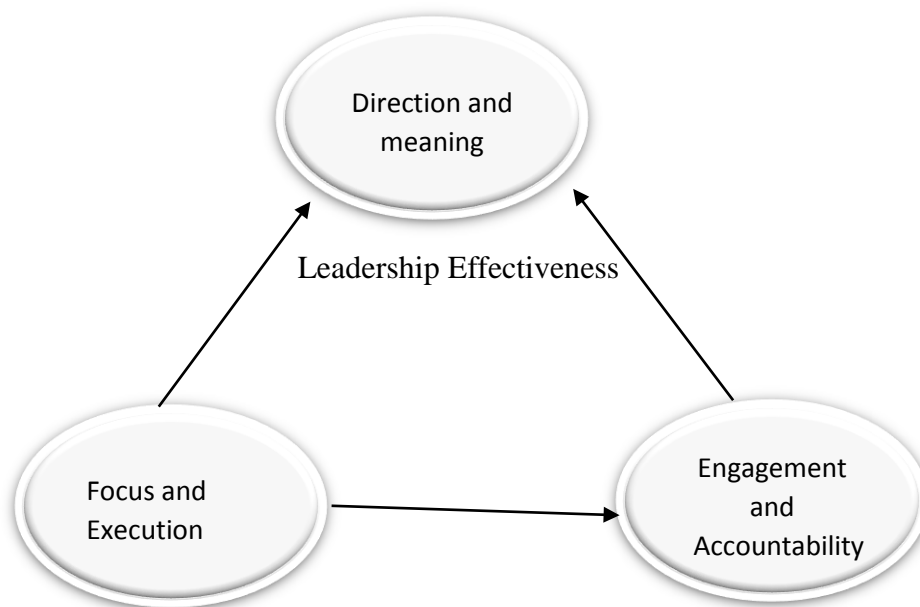


Figure 3.3: Four Promises of Leadership

Source: Anderson & Adams (2016:5).

Promise 1: Set the Right Direction and Create Meaningful Work

The leaders of an organisation are expected to collaborate to provide strategic direction to the organisation by defining the vision and mission required to achieve sustainable growth and profit. The responsibility of the leaders is to identify markets and products that can contribute to sustainable growth and profit, and then to ensure that all employees are aware of the mission and vision of the organisation, thereby creating a culture that is aligned to the values of the organisation. In this way, Anderson & Adams (2016) found that leaders contribute to the development of meaningful work. This view is supported by Carmichael, Collins, Emsell & Haydon (2011) who assert that leaders have the responsibility to drive the strategic direction of the organisation and to disseminate that strategy to all employees to ensure that everyone in the organisation shares a common goal. Hence, the leaders have an obligation to provide an identity or brand for the organisation to create a unique

distinction of what the organisation stands for and its offering to the world. This organisational identity provides meaning to employees which motivates them to participate in the higher purpose of the organisation. This shared identity produces a basis for corporate meaning. This is corroborated by DuBrin (2013) who asserts that the executive of an organisation must provide a corporate identity to stimulate employees' enthusiasm about the contribution they make in the organisation.

Promise 2: Engage All Stakeholders and Hold them Accountable

The direction and meaning of an organisation must not be the responsibility of senior management only, engagement must include employees so that everyone in the organisation can participate in the direction of the organisation (Anderson & Adams, 2016). This promise encourages employees to own the direction of the organisation; however, leaders have the responsibility to ensure that employees are committed and aware of why their contribution and participation is important. This is supported by Alshamsi (2016) who asserts that leaders are responsible for providing strategic direction to organisations and are required to exercise control over employees to successfully achieve the objectives of the organisation. Anderson & Sun (2017) explain the why and what of this promise. The why relates to connecting the value created by the organisation and the individual contribution of an employee to that value. This is an attribute expected from leaders by their employees -- intrinsically a leader should encourage employees to reach their full potential and must create a culture that inspires them to make a meaningful contribution.

Promise 3: Ensure that Processes and Systems Facilitate Focus and Execution

The well-being of employees is dependent on the performance of their organisation which correlates with the organisation's ability to execute its strategic objectives (Anderson & Adams, 2016). The leaders of an organisation are required to guarantee to its stakeholders their ability to implement and deliver on the initiatives identified to achieve the goals of the organisation. Leaders have the huge responsibility of ensuring that their organisations have the necessary resources to make certain that employees can deliver on the strategic objectives, thus securing the successful implementation of key activities (Larsson, Sandahl, Soderhjelm, Sjovold & Zander, 2017). Meaningful success can be achieved by implementing efficient systems that support the vision of the organisation and channel actions into results. Leaders can break this promise (1) by not providing resources that are needed on time, (2) by allowing the organisation to be distracted by other activities, (3) by having too little or ineffective process to support the vision, (4) by being so process-bound that the implementation becomes secondary to the vision of the organisation (Anderson & Adams, 2016). Therefore, leaders must ensure that they lead other effectively in order to achieve greater efficiency.

Promise 4: Lead Effectively

In general individuals in leadership positions are expected to be effective and are measured on a high scale. Employees always expect leaders to improve each year and to provide even better solutions than previous years. Anderson & Adams (2016) assert that leaders must continuously improve and develop their leadership skills in order to continue leading others effectively. The high expectation from the leader is driven by the fear of the damage that can be caused by their inability to lead effectively if they violate the other promises. Therefore, before a leader becomes effective they need to fulfil the first three promises. The effectiveness of a leader must be measured by their ability to stay relevant in a rapidly changing business environment. Hence, leaders must have a passion for personal development which will enhance their competence, self-awareness and conscious so that they are able successfully to guide their organisation through rapid technological changes. Leaders must lead collectively in order to survive the modern world that has seen rapid eruptions of technology (Olley, 2021). Therefore, it is important to provide the basic guidelines that leaders need to take into account to lead millennials and the fourth industrial revolution.

3.15. Leadership and Character

Leaders must have the ability to inspire their followers, in order for them to bring about change, provide direction and make decisions (Pardey, 2016). Therefore, the character of an individual leading others is important, especially when leading the millennial generation (Ramirez, Harrison & Craven, 2018). Character has not been defined in previous studies; however, scholars have referred to personality traits, values and virtues that influence others to be drawn to an individual (Crossan, Gandz & Seijts, 2012). A leader's character infuses different but interrelated aspects of the people who have formed and influenced their behaviour and relationships with others, including personality, attitudes, personal motivation and emotional intelligence (Rahbi, Khalid & Khan, 2017). These attributes have fundamental differences but are interrelated and may have a significant impact on each other. The study of personality was introduced by Cattell in 1944 who found that the personality of a leader influences how effective they can be. Costa & McCrae (1988) continued with the research of the personality traits of conscientiousness, extraversion, openness to experience, agreeableness and neuroticism. Tupes & Christal in 1961 combined the research conducted by Cattell and developed the 'big five' personality traits known today which were identified as the foundation for the study of leadership. Personality traits were found to be the foundation for defining leadership (Liang, Sendjaya & Abeysekera, 2021). The character of an individual reflects their behaviour and what makes them distinct and allows others to identify their actions as a person without witnessing them (Kessler, 2021).

A leader's personality contributes to how they will respond in various situations that may require different interventions in the workplace (Roccas, Sagiv, Schwartz & Knafo, 2016). Literature on millennial reveals that they are able to connect easily with a leader who possesses a personality that is relevant to them which may require a leader to be adaptable to multiple environments (Soto, John, Gosling & Potter, 2011). The traits are referred to as the 'big five' personal dimensions and are said to distinguish individuals and impact on their behaviour. These personality traits can be assessed using various psychometric tests which are normally used by organisations during the recruitment and selection process and for individual development purposes dependent on the position that an individual will occupy (Pardey, 2014). Most organisations assess traits through the use of intelligence, personality and motivation tests. Roccas, Sagiv, Schwartz & Knafo (2016) define these personality traits as:

Neuroticism -- how an individual responds to their environment – which informs their emotional stability. Individuals high on neuroticism tend to display anger, distress and insecurity, whilst individuals low on neuroticism are likely to display calmness, emotional stability and poise. A conclusion can be drawn that a leader who leads millennials and the fourth industrial revolution must display behaviour that is low on neuroticism since, both require an individual who is agile, charismatic, innovative and versatile (Nolan, 2015).

Extraversion -- how extensively an individual enjoys the company of others and actively engages with them, as opposed to an individual who prefers to be on their own or engaged with smaller groups. Individuals high on extraversion have a tendency to be sociable, talkative, assertive and active, whilst those low on extraversion have the tendency to be reserved, cautious and withdrawn. Extraversion has been linked to individuals who have the ability to facilitate the achievement of goals and stimulate others to accomplish their objectives. Millennials and the fourth industrial revolution have proved to be robust, volatile and innovative, thus requiring a leader who is energetic and readily wants to engage in strategies that are forward thinking (Kaifi, Nafei, Khanfar & Kaifi, 2012).

Openness to experience -- how an individual has an interest in exploring different things and has a high level of enthusiasm of discovering new interests, as opposed to an individual low on openness who is not keen to explore other interests. A leader high on openness is described as an individual who is intellectual, imaginative, sensitive and open-minded. In contrast, an individual low on openness is one who is conservative, insensitive and conventional. Tsun-Lok (2016) found that millennials thrive in organisations that display openness to new ideas and leaders who are open to engaging them.

Agreeableness -how an individual is able to accommodate different attitudes, values and points of view.

An individual who appreciates diversity has to have the ability to listen to and accept a wide range of opinions. In comparison to this is an individual who is not open to other people's views, is likely to only focus on their own opinions, and is closed to listening to others. A leader high on agreeableness is in all probability good-natured, compliant, modest, gentle and cooperative. A leader who is low on agreeableness is likely to be irritable, ruthless, suspicious and inflexible. Agreeableness is linked to concern for others, which is an important attribute for an individual who is leading others. Millennials have been found to relate better to a leader who is open to listening to different opinions regardless of their personal points of view (Dannar, 2013). Therefore, this is a characteristic needed to effectively integrate millennials.

Conscientiousness -how an individual displays commitment and is organised in everything that they do. A leader who is conscientious gets things done, whilst a leader who is not will be unreliable. A leader high in conscientiousness tends to be careful, thorough, responsible, organised and scrupulous, whilst one who is not tends to be irresponsible, disorganised and unscrupulous. Anderson, Dahlquist & Garver (2018) assert that millennials tend to disconnect and not follow a leader who does not lead by example and takes no responsibility for their work. They easily identify a leader who is not scrupulous and will speak out against this if they feel that the leader lacks conscientiousness. It is recommended that leaders be enrolled in emotional intelligence courses in order to provide them with insight into effective leadership through their ability to control their emotions and enhance their ability to think rationally in different facets of the organisation (Asencio & Mujkic, 2016).

3.16. Leadership and Attitude

An individual's attitude refers to a continued mental state of willingness to feel and behave in a positive or negative manner towards a person, object or idea (Asvar-ul-haq & Anwar, 2018). The authors submit that attitudes have three dimensions, namely attitudes which are reasonably stable, attitudes which are focused on an object, person or idea, and attitudes which are directed to an individual's behaviour towards a person or an object. Attitude is an individual's view or opinion which can be positive, neutral or negative regarding a particular person, group of people, various types of behaviour, such as public drunkenness, and events an individual encounters, such as theatres, television shows, etc (Govind, Singh, Garg & D'Silva, 2019). Attitude influences an individual's behaviour and reveals their preferences (Brahim, Ridic & Jukic, 2015). Research on millennials has shown that they have specific attitudes towards leaders in organisations, and prefer a leader who has a positive outlook on life in general (Choi Sang, Lim Zhi & Tan Wee, 2016).

Chow, Salleh & Ismail (2017) found that attitudes have three elements, namely cognitive, affective and behavioural:

- The cognitive component – reflects the fundamental beliefs, opinions, knowledge or information an individual has been exposed to that influence their conclusions about others and/or things.
- The affective component – refers to a particular feeling towards an individual's personal impact on the conditions that are observed in the cognitive component. An individual may experience a feeling of not liking their job (negative attitude) which will affect their attitude towards performing the duties of the job.
- The behavioural component – displays an individual's intention to behave in a specific manner relating to the effect that their attitude has on them. This prompts an individual to want to act which may lead them to want to quit a job that no longer appeals to them.

Millennials are labelled as the generation that expects their leaders to set an example in order for them follow that leader (Choubisa, 2017). Hence, a leader with a positive attitude will pass on the same attitude to employees and motivate them.

3.17. Leadership and Motivation

An individual in a leadership position is required to be self-motivated (Soto, Gosling, John & Potter, 2011). Millennials are confident, fearless and easygoing; therefore, they are inclined to follow a leader who is self-assured, self-motivated and relaxed whilst providing direction when required (Clipa & Greciuc Serban, 2018). Millennials have the perception that the older generation does not relate to them as a generation in the workplace (Fairfield, 2018). They believe the older generation is threatened by their personal drive and their standpoint that it is not important to hold onto power but to disperse it to others to increase motivation. Studies have found that motivation relates to the strengths that an individual demonstrates involving direction, level of influence and persistence (Schermerhorn, Osborn, Uhl-Bien & Hunt, 2018). Forastero, Sjabadhyni & Mustika (2018) found that millennials do not value loyalty to the employer, they value self-realisation in organisations, which requires leaders who can motivate them to reach their full potential. Leaders who understand the perceived motivational factors for millennials are likely to increase commitment to the organisation, reduce turnover and satisfy any void in leadership (DeVaney, 2015). Motivation is specific to the individual in a leadership position (Grandy & Sliwa, 2017). A leader is expected to attempt to understand and meet the needs of employees in order for them to perform effectively. Hence, a leader must recognise that motivation is linked to understanding the individual needs of

employees and how those needs are connected to motivation. A leader needs to be self-motivated to be able to motivate others in their team (Bartol & Hill, 2016).

Therefore, an understanding of Abraham Maslow’s hierarchy of needs, that identifies five levels of individual needs, is beneficial as a guideline for a leader to enable them to appreciate what motivation means for each individual. It is important for leaders who lead millennials to understand what motivates millennials to influence them to contribute meaningfully to the organisation. Maslow’s model illustrates five level of needs, such as self-actualisation, esteem, social, safety and physiological; these are divided into higher-order needs and lower-order needs.

| | |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------|
| HIGHER-ORDER NEEDS | Self-actualisation |
| | Highest need level; need to fulfil oneself; to grow and use abilities to fullest and most creative extent. |
| LOWER-ORDER NEEDS | Esteem |
| | Need for esteem of others; respect, prestige, recognition, need for self-esteem, personal sense of competence, mastery. |
| | Social |
| | Need for love, affection, sense of belongingness in one’s relationships with other persons. |
| | Safety |
| | Need for security, protection, and stability in the physical and interpersonal events of day-to-day life. |
| | Physiological |
| | Most basic of all human needs; need for biological maintenance; need for food, water, and sustenance. |

Figure 3.4: Abraham Maslow’s Hierarchy of Needs

Source: Schermerhorn, Osborn, Uhl-Bien & Hunt (2012:103).

The needs described as higher-order needs, such as esteem and self-actualisation, are inclined to be regarded as more important than lower-order needs, such as physiological, safety and social, since the needs of employees change as they evolve in an organisation. A leader is obliged to understand

these needs on an individual basis because not all employees change their needs based on their hierarchy in the organisation (Schermerhorn, Osborn, Uhl-Bien & Hunt, 2012). Therefore, leaders must take into consideration that what motivates employees as individuals is different for each employee; this will enable the leader to improve motivation in the workplace. Millennials value their personal lives and flexibility in the workplace; hence, motivation for them in the workplace will be different from the older generations who valued monetary benefits as a source of motivation (Cresnar & Jevsenak, 2019). Millennials are different from the older generation; therefore, their source of motivation will be different. It is recognised that millennials are attached to their families and personal lives (Kaifi, Nafei, Khanfar & Kaifi, 2012), and are likely to be attracted by organisations that value the family/life balance and may require the use of technology to ensure that this balance is maintained.

3.18. Leadership and Emotional Intelligence

Emotional intelligence has been described as an individual's ability to accurately assess their own and others' emotions and the ability to effectively control their emotions and those of others and use those emotions to motivate, plan and achieve individual and organisational goals (Chow, Salleh & Ismail, 2017).

Therefore, emotional intelligence can be described using the following factors:

- Accurately appraise one's own and others' emotions.
- Effectively regulate one's own and others' emotions.
- Use emotion to motivate, plan and achieve.

A leader who displays high emotional intelligence is aware of their own emotions and how those emotions affect their subordinates and others within the organisation (Schermerhorn, Osborn, Uhl-Bien & Hunt, 2012). Millennials, who are generally stereotyped as being unmanageable employees, require a leader who has high emotional intelligence to lead them (Nolan, 2015). Millennials are sensitive, and this calls for a leader who displays emotional intelligence in conversations with them and who is able to provide feedback that is positive and constructive (Grindrod, 2016). Emotional intelligence is linked with effective leadership and managerial performance because a leader with high emotional intelligence is able to reflect on the decisions they make, and to rationalise (Grandy & Sliwa, 2017). Authors have described specific abilities that which are generally connected with emotional intelligence, such as:

Self-awareness – linked to individuals who have high self-awareness. The leader is aware of their feelings, opinions, beliefs and how their behaviour affects others (Landis & Hill, 2014).

Self-regulation - associated with a leader's ability to control their emotions. A leader who can control their emotions is able to discern why a situation has occurred rather than behaving irrationally (Nguyen, Winata & Chong, 2017).

Motivation or drive - leaders who have high emotional intelligence tend to be naturally inclined to achieve their objectives. They display a passion for their work and have a tendency to want to do better and to improve, relying on feedback they receive from others (Graham, Ziegert & Capitano, 2015).

Empathy - the ability of a leader to consider another person's feeling when they are making decisions. The leader displays empathy towards others by attempting to change work arrangements to accommodate them (Lorber, Treven & Mumel, 2018).

Social skills - a leader is required to be able to build relationships with others with confidence. In the work context, the leader builds relationships to influence others to reach a common goal (Jha & Kumar, 2016).

Research has found that millennials will be open and transparent with a leader who is aware of their emotions and shows empathy towards others, and this ensures stronger relationships between millennials and their leader (Ramirez, Craven & Harrison, 2018). This is corroborated by Naim & Lenka (2017) who assert that millennials struggle to balance their personal and work life, hence they require a leader who has a high level of emotional intelligence and appreciates their struggle. Bannon, Ford & Meltzer (2011) found that there is a general view that millennials are self-centered and unmotivated and are in need of leaders who have the ability to manage their emotions and to understand them as individuals. Meyer (2017) argues that emotional intelligence is an essential skill that all leaders need to possess in order to lead others effectively in the workplace. Olawoyin (2018) contends that leaders who have high emotional intelligence are beneficial to organisations that employ young people because such leaders have the ability to observe, learn and implement changes needed to manage people and processes. Baesu (2018) affirms that leaders play a pivotal role in influencing others to reach their full capacity through the use of emotional intelligence to create efficient teams and build organisational culture. Therefore, leaders have an emotional responsibility to manage themselves and others whilst enhancing performance through emotional intelligence.

3.19. Leadership Styles

Leadership studies have evolved over the years and have been adopted in many organisations as a solution to respond to different organisational needs. Organisations cannot use one leadership style in the everchanging business environment, influenced by internal and external factors (Staats, 2015).

Adoption of a combined leadership approach may enable organisations to adapt to the variety of opportunities and challenges presented by the fourth industrial revolution (Irangani, Zhiqiang, Kumar & Khanal, 2021). Millennials in particular cannot be led by a leader who ascribes to one leadership style because of their need for variety and innovation and their responsiveness to evolving technologies (Gandolfini, Stone & Deno, 2017). In the modern era of business, organisations cannot rely on a singular approach to leadership (Brown, Marinan & Partridge, 2020). The leadership style adopted by an organisation must be based on the needs of the organisation (Kayaalp, Page & Gumus, 2021). However, Nazmul, Fumitaka & Aida (2021) argue that few studies have investigated how organisations assess a leader's capability to display the strength to lead others in different situations. New leadership styles have been proposed to capture the imperative, but overlooked, aspects that are beyond the dominant leadership styles (Fein, Tziner, Vasiliu & Felea, 2015). The aim of the study is to make a contribution to existing theory on the development of a leadership style that can be adopted by the Ethekewini Municipality to integrate millennials and the fourth industrial revolution. It appears that the emergence of millennials and the fourth industrial revolution in the workplace requires leaders who are agile, innovative and have the ability to lead during rapid changes in the workplace. It seems that millennials seek certain traits and characteristics in a leader to understand them and how they choose to work, which is highly influenced by the fourth industrial revolution. This will be achieved by exploring various leadership styles and correlating them with the theory gathered on millennials and the fourth industrial revolution.

Table 3.4: Dimensions and Indicators of Leadership Styles

| Dimension | Indicator |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Relationship | <p>Finds time to listen to group members</p> <p>Is considerate in the relationship with subordinates</p> <p>Is interested in the feelings of subordinates</p> <p>Demonstrates accessibility to subordinates</p> <p>Demonstrates respect for subordinate ideas</p> <p>Stimulates the presentation of new ideas at work</p> <p>Demonstrates confidence in subordinates</p> <p>Is understanding with the failures and mistakes</p> |
| Task | <p>Values discipline and subordination (hierarchy)</p> <p>Values respect for authority</p> <p>Is rigid in complying with the established guidelines</p> <p>Asks that group members follow established norms and rules</p> <p>Puts work first</p> <p>Indicates to the members of the group the specific task of each</p> |
| Situational | <p>Gives freedom of action to subordinates who are reliable for the task to be performed</p> <p>Gives the subordinate greater or lesser freedom of action, depending on his/her competence to perform</p> <p>Give freedom of action to subordinates who are motivated to perform the task</p> <p>Give subordinates greater or less freedom of action depending on their willingness to perform the task</p> |

Source: Nazmul, Fumitaka & Aida (2021:98).

3.19.1. Authentic Leadership

Authentic leaders are effective in organisations that are evolving because they bring stability, consistency, integrity and trustworthiness (Mrak & Kvasic, 2021). An authentic leader in changing times, such as the era of advanced technology, is needed for their ability to build strong relationships with their followers in order to achieve organisational objectives (Balogun, Mahembe & Allen-Ile, 2020). An authentic leader may not be able to relate to followers who do not share similar values and who do not ascribe to presenting themselves as vulnerable (Duncan, Green, Gergen & Ecung, 2017). Authentic leaders are well suited to deal with rapid changes and economic crises that occur in the ever-changing business world (Liu, Cutcher & Grant, 2015). The authentic leader has a profound awareness of themselves, they demonstrate an inclination to act upon their core values whilst interacting transparently with others around them (Lewis, 2013). Studies conducted on millennials found that millennials support leaders who are genuine and leaders who appreciate the contribution they make in an organisation (Mrak & Kvasic, 2021). Hence, an authentic leader can be suited to lead millennials who have been identified as a challenging generation in the work context (Sagbas, Karabal & Surucu, 2021). Research has found that millennials ascribe to ethical values and are not afraid to speak up when something goes wrong; therefore, they require a leadership style that shares this common attribute (Miglia, 2018).

Authentic leaders can be associated with the four dimensions which appeal to a leader required to lead in the era of millennials and the fourth industrial revolution -- transparent, self-conscious, ethical and objective analysis before making decisions (Duncan, Green, Gergen & Ecung, 2017). The key attribute that authentic leaders have which is associated with millennials and the creation of an organisational culture that is conducive for them, is their ability to allow their followers to express themselves freely (Fladerer & Braun, 2020). Research has found that millennials get frustrated in a working environment that deprives them of the right to express themselves freely and is not transparent (Hildenbrand, Daher & Akaighe, 2021). Millennials have been observed to be the generation that wants to share its ideas freely, which can be attributed to the traits of an authentic leaders (Bilgeturk & Baykal, 2021). Millennials are known to value workplaces that promote harmony, independence and loyalty, which have been identified as characteristics of leaders who are transparent and genuine such as authentic leaders (Johnson, 2015). Authentic leaders possess an inner self-security and present themselves as real as opposed to fake (Sainz Delgado & Moriano, 2021). This is an attribute found in literature that refers to millennials as a generation that appreciates a leader who guides with their personal values and with whom they can connect (Montague & Violette, 2017). The concept of authentic leadership was established to train and develop leaders to be genuine and real with themselves and to others (Walumbwa, Avolio, Gardner, Wernsing &

Peterson, 2008). Authentic leadership is one of newest areas of research in leadership (Northouse, 2016). Leadership and management are evolving, and the emergence of millennials in the workplace requires leaders who are authentic and display authentic leadership (Otaghsara & Hamzehzadeh, 2017). The younger employees in an organisation require a leader who can communicate at various levels so that all employees regardless of their status can make a contribution to the success of the organisation (Miglia, 2018). Authentic leaders are described as individuals who influence the development of internal communication strategies to foster transparency and build commitment; this promotes participation by younger employees in the organisation (Sergeeva & Kortantamer, 2021). Millennials require a leader who relies on a different approach to understand them and thus to effectively manage them (Oncioiu & Stanciu, 2017). Millennials need to be managed and led by leaders who are self-aware and are willing to learn from the younger generation and to ensure inclusivity in the workplace (Gregory & Thompson, 2014). Authentic leaders have been described as individuals who acknowledge their own flaws and strive to fulfil the individual potential of others (Soojung & Jeongkoo, 2018). An authentic leader is an individual who generates organisational behaviour that is positive, which is needed for millennials to align to the organisation (Yousaf & Ulhadi, 2020). Authentic leaders possess the attributes that encourage an organisational culture that promotes inclusivity (Ucar, Alpkar & Elci, 2021). The moral depth of authentic leadership is more acceptable in the business world than that of transformational leadership (Brown, Marinan & Partridge, 2020). In the light of the above, authentic leadership may be a leadership style that can create a level of acceptance of the younger generation and play a pivotal role in the effective integration of millennials and the fourth industrial revolution into the workplace.

3.19.2. Servant Leadership

The philosophy of servant leadership was developed by Greenleaf (1970) who found that in the organisational context three introductory themes described servant leadership: the servant leader, the institution as a servant, and the trustees as servants. Jeyaraj & Gandolfi (2019) argue that servant leadership lacks quantifiable research to conceptualise and operationalise the theory universally, which may result in its slow acceptance among scholars. Greenleaf (1977) defines servant leadership as a way of life which originates from an innate sense of wanting to serve others. Parris & Peachey (2013) describe servant leadership as leadership by an individual who possess attributes that are associated with ethics, virtues and morality. Millennials are described by Myers & Sadaghiani (2010) as individuals who are inspired by leaders who make ethical judgments and rely on their values to lead others. Servant leadership must be viewed as a holistic approach that considers a multi-dimensional method to engage followers to encourage them to reach their full potential (Eva, Robin, Sendjaya, Van Dierendonck & Liden, 2019).

The factor that distinguishes servant leaders from others is the leaders' ability to serve others and nurture followers using humility and understanding (Gandolfi, Stone & Deno, 2017). Millennials are described as a sensitive generation that requires a leader who treats them with humility (Wood, 2019). Millennials value leaders who are trustworthy, have credibility and show compassion for others – these are common attributes of servant leadership (Chi, Chi, Khanfar, Gao & Kaifi, 2020). Bass (2000) asserts that servant leaders encourage their followers to learn and grow within the organisation. This is an attribute that millennials seek in a leader since they are viewed as the generation influenced by the fourth industrial revolution, who will require mentoring and guidance (Liu, Chen, He & Huang, 2019). A servant leader can be identified through six significant qualities, namely empowering and developing others, humility, authenticity, interpersonal acceptance, giving direction and stewardship (Peng & Chen, 2021). Millennials require a leader who is authentic, one who offers prospects for learning and growth and empowers them to be innovative and creative (Frankel, 2016). Servant leaders are not conventional individuals whose goal it is to be leaders, they are leaders who aspire to serve others (Giolito, Liden, Van Dierendonck & Cheung, 2021). These leaders possess nine distinctive qualities, namely: vision, honesty, integrity, trust, service, modelling, pioneering, appreciation of others and empowerment (Lan, Xia & Yang, 2021). This is supported by Peng & Chen (2021) who assert that servant leaders have five distinctive attributes: altruistic calling, emotional healing, persuasive mapping, wisdom and organisational stewardship. Lan, Xia & Yang (2021) found that subordinates who are encouraged by servant leaders are innovative, strive to stay engaged and perform well within the workplace.

Leaders in organisations must mentor, collaborate and build relationships based on trust with millennials in order to keep them engaged (Sun, Chen & Yang, 2021). A servant leader who leads millennials is required to be willing to serve others and to show that they care (Lumpkin & Achen, 2018). This view is supported by Sun, Chen & Yang (2021) who emphasise that servant leaders' focus on the employee and motivating them to fulfil a shared goal whilst also taking into consideration their needs. Zhu & Zhang (2020) argue, on the other hand, that servant leadership may not always be the ideal leadership style to motivate millennials to adapt to new challenges in the workplace. It appears that servant leadership comprises of various attributes that millennials can relate to within the workplace; therefore, this study seeks to explore the leadership style to which millennials are most likely to align themselves. The attributes of servant leadership enhance their followers' attitudes to serve others in the organisation, thus creating a culture of unity and trust to which millennials ascribed (Ahmet & Sedat, 2021). Servant leaders are known to appeal to millennials based on their strong belief in rewarding, recognising and motivating employees (Chi, Chi, Khanfar, Gao & Kaifi, 2020). It is argued by Brown, Marinan & Partridge (2020) that, although

millennials may relate to servant leaders, servant leaders may not necessarily make a meaningful contribution to the working environment considering the rapid global changes taking place caused by robust advances in technologies. Mehambe, Heine & Engelbrecht (2018) argue that servant leadership can be effective in the modern era propelled by advanced technology because servant leaders attract followers to commit to the organisation by consistently demonstrating trustworthiness and interpersonal acceptance. Servant leaders are able to influence their followers in all age groups to commit to the vision of the organisation based in their focus of putting people first at all times (Eva, Liden, Robin, Sendjaya & Van Dierendonck, 2019).

3.19.3. Transformational Leadership

Transformational leadership is among the six predictors of happiness for millennials in the workplace (Yap & Batri, 2020). Transformational leadership is known for its responsiveness to challenging situations and its willingness to change the status quo to adapt to new variations. This is essential when organisations and their employees are faced with increasing competition within their industry (Wang, Zheng & Zhu, 2018). A transformational leader has a substantial impact on the achievement of organisational outcomes (Duan, Li, Xu & Wu, 2016). Such a leader has the ability to turn threatening situations into achievable organisational outcomes (Van Dijk, Kark, Matta & Johnson, 2021). Transformational leaders are preferred by millennials because of their ability to adapt easily to rapid changes, such as the use of advanced technology (Kayaalp, Page & Gumus, 2021). Transformational leaders stimulate and develop the intellectual potential of employees through coaching leadership (Brown & Nwagbara, 2021). Millennials have the intellectual ability to transform the workplace when they are mentored and coached by leaders who show an interest in their talents (Wood, 2019). This correlates to research conducted by Calk & Patrick (2017) who found that millennials driven by the fourth industrial revolution aspire to be led by a leader who identifies their individual strengths and motivates them to reach their full potential. Transformational leaders pay attention to arousing the motivation levels of their subordinates by providing a clear enthusing visualisation of the future (Kayaalp, Page & Gumus, 2021). Millennials are more interested in joining an organisation that is cognisant of their individual potential and strives to keep them stimulated (Fronstin & Helman, 2016).

Therefore, this requires a leadership style such as transformational leadership that is responsive to the preference of the new generation of employees (Zhao, Fan & Chen, 2021). Transformational leaders have characteristics that bring them closer to their followers, these are: introducing transformation, raising innovative ability, formulating and executing strategy, problemsolving, organisational renewal and revival, gaining competitive advantage and performance outcome (Jumoke & Lubbe, 2021). The demand for the use of technology in the workplace is highly

influenced by the influx of millennials at various occupational levels who require, amongst others, that decisions be made instantaneously (Ozdamli & Ozdal, 2015). Transformational leaders strive to develop team creativity, which research has found to be one of the work preferences for millennials (Van Dijk, Kark, Matta & Johnson, 2020). Transformational leadership is required to lead millennials in this era when organisations are faced with rapid economic changes and the consequent need to adopt modern ways of conducting business (Alnwaiqah, 2020). The current economic and social events in South Africa require transformational leadership to cope with the changes brought about by the fourth industrial revolution (Lovaas, Jungert, Van den Broeck & Haung, 2020). Millennials are most likely to connect with transformational leaders because of their ability to provide strategic direction and to act swiftly when leadership is required (Liu, 2021). Transformational leaders are known to influence their followers through intellectual stimulation – an attribute required to lead millennials (Mohsin Shafi, Sarker & Zheng Lei, 2020). O'Reilly & Chatman (2020) argue, however, that transformational leaders may display narcissistic behaviour based on their reliance on their own achievements that they use to influence their followers. Transformational leaders are preferred in modern leadership, particularly to lead organisations towards the optimisation of the fourth industrial revolution (Khan, Khan, Soomro & Khan, 2020). Transformational leaders and millennials share the same attributes – they are both confident, charming, self-willed and brave, which may make millennials relate to the transformational leadership style in the workplace (Singh & Kumar, 2021). Therefore, it seems that transformational leadership may play a role in the integration of millennials and the fourth industrial revolution into the workplace.

3.19.4. Charismatic Leadership

Over the years organisations have evolved operationally and culturally under the management of charismatic leaders who are willing to take business risks and stimulate employees towards achieving higher milestones (Le Blanc, Gonzalez-Roma & Wang, 2021). Charismatic leaders will be able to work well with millennials because of their commitment to teamwork and their ability to influence young people to become innovative in the workplace (Zhao, Tian, Wen & Gao, 2021). The advancement of the fourth industrial revolution has had an impact on both the internal and external environments of organisations; this requires charismatic leaders to encourage and stimulate millennials to participate in the day-to-day operations in order to maintain competitive advantage (Behr, 2021). Millennials work effectively and efficiently with charismatic leaders because they use charisma and/or charm to influence the young generation to work at their optimum level (Karim, Halim, & Kardiyati, 2021). Charismatic leaders play the role of individual agents in an organisation to influence millennials to become innovative and to achieve high performance cultures that lead to

organisational success (Wivel & Gron, 2021). Millennials and charismatic leaders share a common trait, namely entrepreneurial thinking that promotes high performance, positive feedback, relationship building and recognition (Papagiannakis & Lioukas, 2018). The attitudes that charismatic leaders impart on millennials have a positive impact on the organisation because the achievement of organisational targets becomes the priority whilst creating a conducive working environment (El Haddad, Bonnet & Tabchoury, 2021). The work relationship between millennials and charismatic leaders has become prevalent based on the influence and ability of charismatic leaders to achieve employee innovation (Nassif, Hackett & Wang, 2021). Charismatic leaders have been found to maintain leader-follower relationships, particularly with millennials whom they have nurtured to adopt positive workplace behaviour (Chang, 2018). In most organisations there is a general view that millennials are the future leaders and that the organisational culture has shifted towards understanding the millennial generation through practising the art of charismatic leadership (Kaifi, Nafei, Khanfar & Kaifi, 2018). Millennials have a strong relationship with self-sufficiency, transformation and appreciation, which charismatic leaders understand and provide to them as a generation (Thompson & Gregory, 2014). A strong attribute of charismatic leaders who lead millennials is the recognition that millennials give to the leader which enables the leader to articulate the organisation's vision to achieve success (Le Blance, Gonzalez-Roma & Wang, 2021). Brown, Marinan & Partridge (2020) share the same view that charismatic leaders enjoy tremendous support from millennials as a result of the synergy in values and belief systems that exist between the leader and the follower. Adiguzel & Cakir (2020) argue that charismatic leaders tend to persuade millennials to imitate the behaviour, values and beliefs of the charismatic leader.

And Hansen, Miller & Noack (2020) note that millennials who imitate and follow charismatic leaders may find themselves compromised when they disagree with the actions of a charismatic leader. The influence that charismatic leaders have on their followers can become detrimental to the follower and the organisation because of the strong relations built between the leader and the follower (Sacavem, Martinez, Da Cunha, Abreu & Johnson, 2017). The primary function of charismatic leadership is to create good communications that translate to a shared vision at all levels in the organisation (Jamal & Abu Bakar, 2017). Charismatic leaders are utilised mainly in the public sector in times of crisis and for reputation management when there is a need for transition in the organisation (Luu, 2019). Senior managers in most organisations tend to label millennials as inexperienced and overlook the contribution they may make to improve processes; in such instances a charismatic leader may be needed to strengthen communication between millennials and senior managers (Subedi & Scott, 2021). Communication through charismatic leadership, particularly in the public sector, plays a major role in ensuring that all stakeholders internally and externally are

informed of the strategic direction of the organisation (Nassif, Hackett & Wang, 2021). Charismatic leaders are needed in organisations for their ability to relate to and communicate with all employees at different levels within the organisations (Le Blanc, Gonzalez-Roma & Wang, 2021). A charismatic leader is an individual who portrays four types of leadership action: charismatic, directive, participative and supportive (Brown, Marinan & Partidge, 2020). Charismatic leaders are needed during rapid changes in organisations brought about by developments in technology in order to stabilise the pressures of competition through supportive and participative action (Behr, 2021). It emerges that charismatic leadership may have a crucial role in ensuring that the impact and understanding of the fourth industrial revolution are clearly articulated in the workplace. Charismatic leaders who display charismatic, participative and team-orientated qualities are likely to be at the forefront of providing strategic direction during stages of change in organisations (Ziegert, Mayer, Piccolo & Graham, 2021). Charismatic leaders use their confidence, positive sentiments and imaginative visualisation to inspire and motivate their followers (Zhao, Tian, Wen & Gao, 2021). A charismatic leader is more inclined to connect with young employees through their ability to use their personality to build trust relationships (Hansen, Miller & Noack, 2020). This quality of charismatic leaders may be needed for millennials to be understood in the workplace as they have been described as the generation that appreciates leaders who are open-minded (Luu, Rowley, Dinh, Qian & Le, 2019).

3.20. Conclusion

The literature review focused on theory relating to millennials, the fourth industrial revolution and leadership. The chapter presented existing literature on the topic and assisted the researcher to contribute to the knowledge and to answer the research objectives. In summary, this chapter demonstrated the gaps in literature relating to the integration of millennials and the fourth industrial revolution into the workplace. The study established, based on the literature, that most countries and organisations have not successfully integrated millennials and the fourth industrial revolution due to the pace at which both variables have disrupted the workplace. It is evident in the literature that millennials are not understood as a generation in the workplace. The literature indicated that there may be a disconnection and a lack of synergy between millennials and the older generation. It was apparent that there is a connection between millennials and the fourth industrial revolution. It was established that millennials were born in a time which saw the ascent of technology, hence they have an intense preference to work for organisations that promote and propel the use of advanced technologies to enhance day-to-day operations. In many developed countries technology is advancing so rapidly that organisations are compelled to invest in the younger generation to find new solutions to enhance products and services. The local government sphere is not ready for the

fourth industrial revolution and may require a strategy to integrate millennials to drive the opportunities of the revolution. Most studies reveal that millennials will lead organisations by 2025; however, municipalities may have a challenge in this regard due to the lack of readiness in creating a workplace culture that includes technology. It is evident that the local government sphere has not prepared the workplace for a future driven by technology, which may pose a threat to jobs and create challenges to the efficient provision of services to communities. The national government has recognised the importance of integrating the fourth industrial revolution into all spheres of government in order to empower it to compete internationally; however, the country does not seem to have a clear plan on how to practically integrate the fourth industrial revolution into the public sector. The fourth industrial revolution is compelling organisations to become innovative and creative, which requires the skills and expertise millennials have in relation to the use of technology. The changes presented by rapid technological advancements are challenging leaders in organisations to become proactive in the integration of technology to stay competitive and sustainable; however, the public sector still remains in the dark on how to manage these changes. In South Africa, a commission has been established to champion the fourth industrial revolution, although there appears not to be a clear plan detailing how government will manage the disruptions of the revolution which threaten the economy and society.

Studies have shown that leadership has evolved to include a mix of leadership styles that may be adopted by organisations to achieve a certain objective. Some leadership styles if compared to others are more acceptable to remedy a particular situation or to achieve a specific objective. Hence, it is common that authentic leaders in comparison to transformational leaders in some organisations may be utilised to create a culture that has followers who value positive behaviour within the organisation (Mrak & Kvasic, 2021). Transformational leaders may be required in this instance to implement the integration of millennials and the implementation of the fourth industrial revolution based on their ability to provide strategic direction and to bring about positive change in organisations. The municipality may require a mixed leadership approach of authentic leadership and transformation leadership to deal with slow service delivery, to eradicate corruption and to implement the integration of millennials and the fourth industrial revolution. Organisations must consider a mixed leadership approach to create a balance of attributes required from individuals in leadership positions (Munyon, Houghton, Simarasl, Dawley & Howe, 2021). In this regard, a different leadership approach may be required to manage the changes presented by millennials and the fourth industrial revolution. Additionally, different leadership styles were explored which closely relate to the qualities that millennials require in a leader. The literature revealed that studies have not focused on millennials and how they should be led and the leadership style that must be adopted to integrate

them and the fourth industrial revolution. It is on this basis that this study focuses on the development of a leadership model to integrate millennials and the fourth industrial revolution into the workplace since both can no longer be ignored. The next chapter explores the research methodology that was selected to conduct the study.

CHAPTER FOUR: RESEARCH METHODOLOGY

4.1. Introduction

This chapter examines the research methodology utilised to conduct the study. Research methodology refers to a plan by a researcher that details the process to be used to discover a solution to multifaceted issues (Abdalla, Oliveira, Azevedo & Gonzalez, 2018). It is an inclusive technique applied to the exploration process from hypothetical foundation to compilation and data scrutiny (Adom, Hussein & Joe, 2018). A planned approach in research should be aligned to the anticipated outcome; however, selecting the research method is informed by the nature and characteristics of the particular area of concern (Adamson & Wachsmuth, 2014). Put differently, the research approach should be chosen based on the problem statement of the study. In this regard, this study is interdisciplinary in nature as it includes leadership, millennials and the fourth industrial revolution. As such, the research methodology utilised in this study (explored below) was selected taking into consideration the nature and features of the research objectives as well as the inter-disciplinary nature of the research. This chapter explores empirical research methodology. The empirical research method is defined as research conducted using experimental or practical evidence (Amankwaa, 2016). It involves direct or indirect observations through either qualitative or quantitative research methods (Amankwaa, 2016). A mixed methodology was utilised to gather data to address the objectives of the study. Mixed methods research has been found to be beneficial as it utilises both methods thereby allowing the researcher to tackle multifaceted social issues (Christenson & Gutierrez, 2016).

It has further been found to provide a greater degree of appreciation of the complexities of research as it explores the subject from different angles (Christenson & Gutierrez, 2016). Consequently, the mixed methods approach provides a comprehensive representation of the topic under scrutiny which cannot be achieved through a single research method (Cavaleri, Onwuegbuzie & Green, 2012). In this context, the researcher conducted interviews with municipal leaders responsible for integrating millennials and the fourth industrial revolution into the municipality. Additionally, surveys were conducted with millennials to link the information gathered from the leaders, thereby ensuring the reliability and validity of the study. In this regard, Chapter Five presents a narrative of the data gathered from the participants during the interviews. Against this background, this chapter is organised as follows: firstly, it explores the empirical research methodology by examining, among other things, research designs, philosophy, research strategies and sampling techniques. It then proceeds to explore how data was collected and analysed, as well as ethical considerations. The chapter concludes by exploring the limitations of the study.

4.2. Research Design

Research design refers to the structure that is used as a guideline to outline the use of research methods and the analysis of data (Arseven, 2018). The selection of the research design used in the study reveals the decisions taken on the significance of accompanying the dimensions of the research methods include the following (Malhotra, Schaller & Patil, 2017):

- How to express casual connections between variables.
- Whether and how the results can be generalised to a larger group of individuals or organisations than those actually forming part of the investigation.
- How to understand and explain behaviour and the meaning of that behaviour in its specific social context.
- How to explain social phenomena, their interconnections and changes over time.

Research design incorporates three core classifications, namely exploratory, descriptive and casual (Schaller, Patil & Malhotra, 2015).

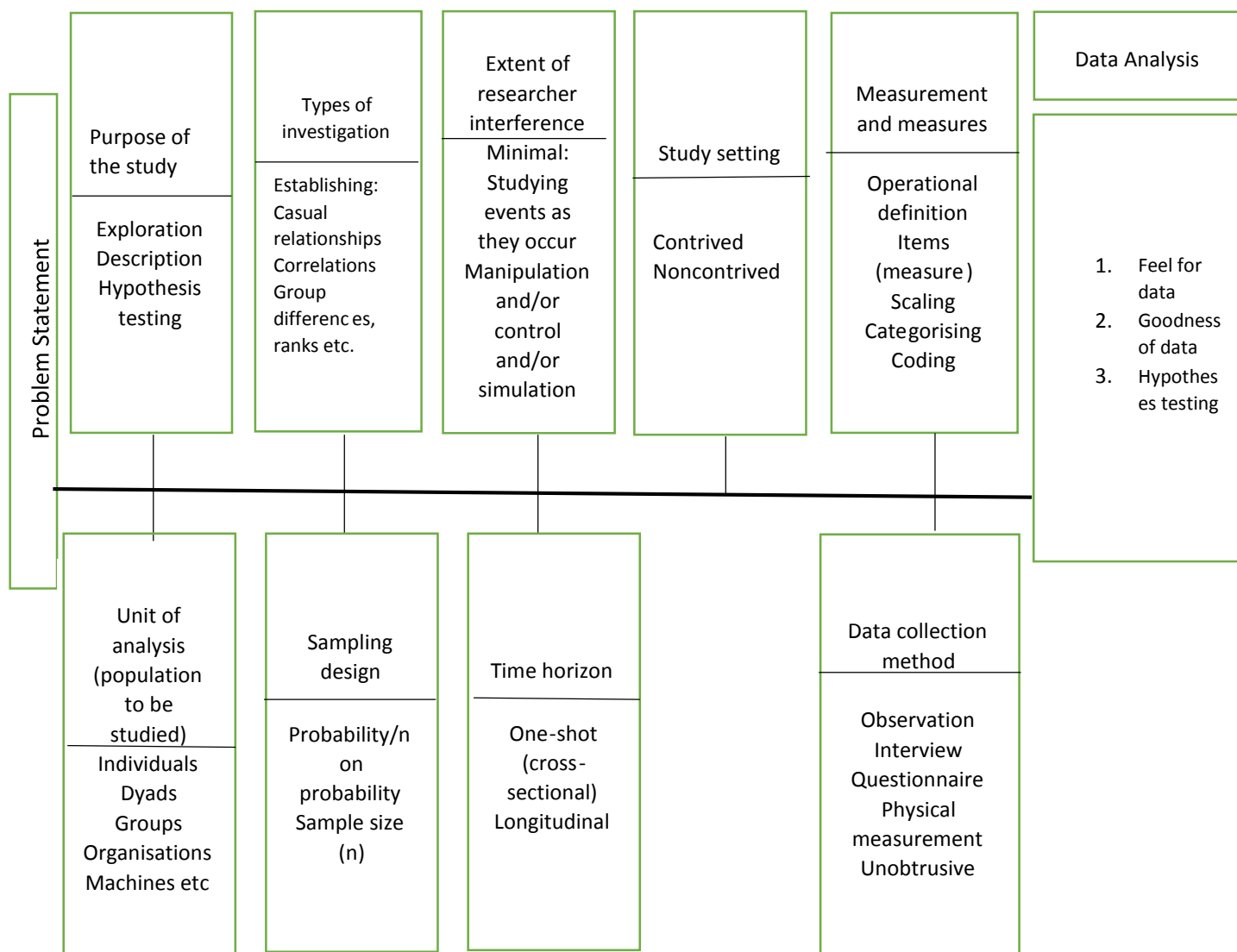


Figure 4.1: The Research Design

Source: Sekaran & Bougie (2016:102).

4.2.1. Exploratory Research

Exploratory research is described as research that is conducted initially to explain and outline the description of the problem (Zikmund, Babin, Carr & Griffin, 2013). Exploratory research refers to preliminary research aimed at increasing understanding of a particular concept, obtaining clarity and describing the nature of the problem and/or ascertaining the critical variables needed to be studied (McDaniel & Gates, 2013). Exploratory research is used to investigate the phenomena to understand what is occurring before a prototype for the research design is set up for a thorough investigation (Sekaran & Bougie, 2011). This study used a mixed methods approach to collect data; however, exploratory research was used as a preliminary step to ensure that the study is thorough and conclusive. Exploratory research is necessary for studies that seek to explore an unknown area,

which is the case in respect of the fourth industrial revolution and millennials in South Africa (Jiang, 2018). Research on both subjects is limited, and especially in the South African context literature is limited from a workplace and leadership perspective. The researcher chose to use exploratory research to gain a better understanding of the concept and to investigate all information relating to the research problem. The purpose of using exploratory research is interrelated in three approaches: (1) diagnosing a situation, (2) screening alternatives, and (3) discovering new ideas (Zikmund, Babin, Carr & Griffin, 2013). Exploratory studies are conducted to investigate a situation that is not known or where there is no information on hand regarding problems or research subjects that have been solved in the past (Sekaran & Bougie, 2013). These studies can be conducted through interviews and focus groups, which the researcher has utilised to gain a better understanding of the research topic. The researcher conducted a wide range of preliminary work to gain more knowledge on the fourth industrial revolution and millennials in the workplace and also conducted interviews with leaders to determine their impact on the workplace. Exploratory research is beneficial in instances where the researcher wishes to conduct research to gain insight on the challenges that leaders face (Cooper, Schindler & Sharma, 2012).

Hence, the researcher utilised exploratory research in this study to collect data on the experiences of leaders relating to the fourth industrial revolution and millennials in the workplace. The utilisation of exploratory research was beneficial to this study in that it allowed the researcher to advance the hypothesis on the research topic. Exploratory research was utilised to collect information from a small group of leaders. Exploratory research is advantageous to a researcher to gather information from a small sample (Cooper, Schindler & Sharma, 2012). It is regarded as an important tool to gain knowledge on what is occurring, and it is known to be flexible and adaptable when changes occur based on new information. The study used a mixed methods approach that incorporated both qualitative and quantitative methods, exploratory research in this instance is linked to qualitative methods. Exploratory research is key in collecting data that is qualitative in nature through the use of structured and semi-structured interviews (Saunders, Lewis & Thornhill, 2016). The interviews were used to gather data from the leaders and a focus group was conducted with the millennials. Interviews were beneficial to the researcher in that the researcher was able to gather pertinent information from the leaders who were able to share their personal work experiences relating to millennials, the fourth industrial revolution and leadership.

4.2.2. Descriptive Research

Descriptive research design is used to uncover and gather data that investigates features that are relevant to a particular issue (Sekaran & Bougie, 2013). Descriptive studies are useful to answer questions such as who, what, when, where and how (McDaniel & Gates, 2014). Hence, this study

utilised descriptive research to gain a better understanding of how the municipality has integrated millennials and the fourth industrial revolution through the use of in-depth interviews. Saunders & Lewis (2018) assert that this type of research is useful to provide an accurate description of individuals, occasions and circumstances. Descriptive research undertakings provide the researcher with a precise and an inclusive account of the situation (Saunders & Lewis, 2018). Descriptive research is associated with quantifiable data which is gathered using a numerical or statistical approach (Struwig & Stead, 2004). Hence, in descriptive research structured interviews, observation and questionnaires are utilised as a data collection method (Crouch & Housden, 2003). Descriptive research is associated with case studies, questionnaires and statistical analysis (Flick, 2015). Descriptive research was used in this study to link the data gathered from the interviews and the focus group with the data gathered from the millennials through the questionnaire. This type of research was useful to identify associated variables; however it was recognised that it could not provide concrete evidence that indicated which variable influenced another variable (Shannon-Baker, 2015).

4.2.3. Survey Research

Survey research includes cross-sectional design which relates to data that is collected mainly through the use of questionnaires or structured interviews either more than once or at a single point. The purpose is to collect data that is quantitative or quantifiable to identify patterns that are associated (Kara & Pickering, 2017). Survey research can be referred to as a system used to collect information about or from people, to describe, match and clarify their understanding, attitudes and behaviour (Flick, 2015). According to Sekaran & Bougie (2016) survey research involves the setting of objectives that will be required to collect data, designing the study, formulating a valid and reliable survey instrument, administering the survey, managing and analysing the data received from the survey, and providing a report on the findings. The study utilised survey research to collect quantitative data through the use of a questionnaire. Survey research in this study was used to identify patterns in the responses that the millennials gave relating to a number of variables in the workplace (Arseven, 2018). Cross-sectional design is referred to as a social survey design connected closely with the use of questionnaires and structured interviews (Lueng, 2015). Survey research is research that specifies quantitative or numeric depiction of trends, attitudes or the judgment of the participants in a study by learning or studying a sample of the population (Creswell, 2014). This type of research comprises of cross-sectional and longitudinal studies through the use of questionnaires or structured interviews to gather data with the intention of generalising from a sample comprising of a population (Flick, 2015).

This is corroborated by Astroth (2018) who asserts that survey research includes cross-sectional studies that relate to data collected through questionnaires or structured interviews in order to quantify data connecting two or more variables, which are studied to detect patterns that are connected. The questionnaires in survey research are referred to as primary data that are used to collect facts, opinions and attitudes relating to a specific topic (Bjekic, Jelace & Lekovic, 2016). Cross-sectional design can be divided into a number of elements which are useful to researchers collecting data that is quantitative (Arseven, 2018):

- **More than one case** - researchers using cross-sectional design are interested in variation. The variation could be in relation to people, organisations, countries, etc. Variation is prevalent when a researcher is investigating more than one topic. Researchers tend to find variations in variables they are interested in which can be investigated further to identify distinctions between cases, this may require an increase in the sample (Chingwe & Makuwira, 2018).
- **At a single point in time** - research through cross-sectional design requires data on the variables the researcher is interested in to be collected simultaneously. This is the case where a researcher utilises a questionnaire to collect data, the questionnaire may contain 40 variables, and the responses to the questions are generated at the same time (Williams & McGonagle, 2016).
- **Quantitative or quantifiable data** - in cross-sectional design researchers establish variation among cases by employing a systematic and standardised method to gauge variations. This allows the researcher to develop a consistent benchmark through quantification (Williams & McGonagle, 2016).
- **Patterns of association** - the use of cross-section design allows the researcher to observe relationships among variables. Although the data is collected simultaneously the researcher is not able to manipulate the data (Williams & O'Boyle, 2015).

4.3. Research Philosophy

Research philosophy is described as the development of knowledge associated with assumptions and beliefs (Saunders & Lewis, 2018). The assumptions are usually grouped into three categories: ontological, epistemological and axiological assumptions. The influence that these assumptions have on the researcher is that they provide an understanding of the research questions, research methodology and interpretation of the findings (Astroth, 2018).

4.3.1. Ontological Assumptions

The assumptions in ontological studies are that they delve into the nature of the reality of the subject. The primary matter in studies is based on the detail the researcher chooses in relation to the research questions about the study (Cresswell, 2014). Ontological assumptions are crucial to identify the circumstances of the study and provide an overview of the direction that the researcher will take to conduct the study (Zikmund, Babin, Carr & Griffin, 2013). An example of the nature of the reality of this study is that the municipality has a long-term strategic plan that does not include the fourth industrial revolution despite the fact that it has been adopted by national government to create efficiency in the policies, processes, systems, etc in municipalities. That the plan does not include how the municipality will integrate millennials and the fourth industrial revolution supports the need for the study to develop a leadership model to strategically include both concepts. Although there are various research philosophies discussed in this chapter, it is argued that due to the nature of the study, it was important to explore the philosophies to demonstrate that the researcher explored various research methods to gather the data. On this basis, all pertinent research philosophies were highlighted to provide a clear understanding on what informed the researcher to choose the most appropriate research design in this study.

4.3.2. Epistemological Assumptions

Epistemological supposition is based on the validity and reliability of the information gathered for the study (Zikmund, Babin, Carr & Griffin, 2013). These studies focus on the information needed for the researcher to answer the research questions and to fulfil the objectives of the research. The aim of conducting research is to contribute to knowledge and to develop knowledge (Zikmund, Babin, Carr & Griffin, 2013). Therefore, to ensure that the research is valid and reliable the researcher conducted interviews with individuals in executive positions in the municipality who have decision-making power relating to the integration of millennials and the fourth industrial revolution. The millennials participated in a questionnaire designed by the researcher to gain an understanding of their perceptions of the municipality in relation to its readiness to integrate them and the fourth industrial revolution into the workplace. With the information gathered from the leaders and millennials the researcher's aim was to explore the leadership style that must be adopted by the municipality to effectively integrate millennials and the fourth industrial revolution.

4.3.3. Axiological Assumptions

The purpose of axiological assumptions is to establish the significance of values and ethics in the research process (Saunders & Lewis, 2018). The preservation of ethics during the research process is important to ensure that the behaviour of communities and their customs are considered by the

researcher and the participants (Adom, Hussein & Joe, 2018). Render, Stair Hanna & Hale (2018) stated that in axiological assumptions the researcher must conduct the research in good faith since ethics are the cornerstone of the entire research process. Researchers are encouraged to conform to ethical standards during their research to ensure that the study is credible (McGonagle & Williams, 2016). The researcher is expected to provide participants with consent forms so that the participants are not coerced into participating in the research.

4.4. Phenomenological Research

Phenomenological research involves data that is gathered on the life experiences of the participants that is linked directly with what has been experienced by the participants (Amankwaa, 2016). Research conducted by Carr, Griffin, Babin & Quinlan (2015) describes phenomenological research as research that is subjective and focuses on the human experiences of the participants. This type of research allows the participants to share their life experiences without the influence and bias of the researcher (Lueng, 2015). In phenomenological research the researcher has the opportunity to interact with participants in various ways, including probing questioning to gain more information on their experiences which may be beneficial to the research topic (McDaniel & Gates, 2015). The pertinence of phenomenological research to this study is that it provides information that is accurate and gives the researcher factual information (Clough & Nutbrown, 2013). The focus in this type of research is to establish the social and psychological views gathered from each participant during the data collection phase relating to the research topic (Curwin & Slater, 2014). Phenomenological research was used in this study to investigate the understanding of the leaders of the research topic through the use of qualitative methods. The researcher gathered data for this study through the use of interviews and a focus group which relates to phenomenological research. The leaders who were interviewed and the millennials who took part in the focus group provided responses based on their real-life experiences in the workplace in relation to millennials and the fourth industrial revolution. This type of research requires the researcher to engage with smaller samples since some topics are relatively complex (Gripton & Vincent, 2021).

During the data collection phase participants are explicit in their responses, therefore, the researcher gains a broader understanding of the social challenges that the participants have dealt with through the use of phenomenological research (Curwin & Slater, 2014). This study benefited from the phenomenological approach since leaders were interviewed to obtain an understanding of the challenges they face in the Ethekwini Municipality in relation to the integration of the fourth industrial revolution. Bazeley & Jackson (2015) assert that phenomenological research is appropriate in research topics that are inclined to seeking answers to questions on human experiences, which is regarded as data that is valid and reliable.

4.5. Hermeneutics

Hermeneutics is significant in phenomenology (Zikmund, Babin, Carr & Griffin, 2013). It is a method used to understand phenomenology which relies on the analysis of texts in which participants express their history (Asroth, 2018). Meaning is illustrated through connecting text passages to one another or themselves expressed by the participant (Hesse-Biber & Leavy, 2017). The connections are facilitated through the use of coding key meanings expressed by the participants about their story (Bazeley & Jackson, 2015). Hermeneutics produces a hermeneutic unit that is a text passage received from a respondent that the researcher can link with an important theme provided by the researcher (Zikmund, Babin, Carr & Griffin, 2013). These passages are significant in that they influence how the data collected from the participants is interpreted. Hermeneutics were pertinent to this study to ensure that the data collected was coded to develop themes which were interpreted from the real-life experiences of the participants.

4.6. Ethnography

Ethnography is the study of culture in which the researcher becomes intensively involved with the culture (MacDaniel & Gates, 2013). In ethnography, participant-observation represents research that is linked to studying cultures. It relates to how engrossed a researcher becomes within the culture that they are researching and depicts data gathered from their observations (Sekaran & Bougie, 2013). Culture can refer to the way of life in a particular country or it can refer to a smaller segment of society, such as an urban gang (Crouch & Housden, 2003). Ethnography is common in studies that involve organisational culture and assists the researcher in observing behaviour and collecting helpful data (Clough & Nutbrown, 2012). If the researcher is or was an employee, their personal observations can contribute to the ethnographic research of the organisational culture.

4.7. Grounded Theory

Grounded theory represents an inductive investigation, which allows the researcher to pose questions about information given by the participants or information gathered from historical records (Arseven, 2018). The researcher asks questions and repeatedly probes the answers given by the participants in order to obtain a deeper understanding of the explanations (Lueng, 2015). Grounded theory is applicable to studies that utilise systematically collected and analysed data that involves fast and meaningful changes to society (Bansal, Smith & Vaara, 2018). Researchers have to answer two key questions, namely what is happening here? and how is it different? Zikmund, Babin, Carr & Griffin (2014) observed that the grounded theory does not begin with a theory, instead it extracts theory from information that emerges from an area of enquiry. This research philosophy was

discussed in this study; however, it was not relevant because this study did not focus on investigating a topic that has attracted little research and or is under-researched.

4.8. Case Studies

Case studies refer to documented history pertaining to a particular person, group, organisation or event (Bansal, Smith & Vaara, 2018). A case study describes the events of a specific organisation confronted with making an important decision, such as the introduction of a new product or the management of a crisis within the organisation (Sligo, Nairn & McGee, 2018). The information in case studies is acquired through interviewing managers or customers of the organisation (Bazeley, 2015). Analysis of case studies is useful to develop themes (Cresswell, 2014). The frequency with which terms arise in the narrative description in case studies are identified as themes (Asroth, 2018). Themes are used to determine variables which the researcher can explore for potential explanations (Evans, Coon & Ume, 2011). This research philosophy was discussed in this study; however, it was not relevant because the researcher did not intend to conduct a study pertaining to an individual or a group of people or a unit.

4.9. Positivism

Positivism refers to science and scientific research used to obtain the truth (Sekaran & Bougie, 2014). Positivists rely on natural science that can make it easier to understand the world to predict and control its outcomes based on the belief that human knowledge is developed through scientific interpretation of experiential information (Saunders & Lewis, 2018). Curwin & Slater (2014) found that positivism relies on experiments that are systematic, thus providing the researcher with authentic data that requires no human analysis to corroborate it. A scientific approach is required to determine the cause and effect in which the world operates and relies on factual knowledge obtained from observation derived from measurements that are trustworthy (Sekaran & Bougie, 2013). This type of research focuses on accuracy and validity, reliability of observations and generalisation of the findings of a study (Cresswell, 2014). Positivism produces data that is quantified and objective (Hodis & Hancock, 2016). Grimm & Mazza (2016) assert that researchers must be cognisant of the concept of objectivity, meaning that the researcher must understand that the data being studied must be authentic and separate from the subjective reality of the individual. This study used positivism to assess the readiness of the Ethekewini Municipality to integrate millennials and the fourth industrial revolution. Positivism was relevant to this study in that the researcher used questionnaires to gather data from the millennials through the use of an extremely structured methodology. This was required to focus on quantifiable observations which yielded numerical examination. Therefore, positivism was necessary in this study to explore numerical data.

4.10. Research Methods

It is common for a researcher to make a decision, prior to the data collection process, on the method they will use for analysis of that data and the technique that will be used for statistical data (Astroth, 2018). However, this is not common in qualitative research where there is usually an overlap in theory formulation, research design, data collection and data analysis (Fetters & Freshwater, 2015). Quantitative, qualitative and mixed methods are the most familiar approaches used to conduct research (Curwin & Slater, 2014). The approach selected by a researcher is founded on the data that is essential to answer the research questions (Arseven, 2018). In qualitative research the focus is on observation, listening and interpreting; in contrast, quantitative research focuses on analysing numerical data (Zikmund, Babin, Carr & Griffin, 2014). The fundamental difference between quantitative and qualitative research is that qualitative research discovers ideas through the use of exploratory research whereas quantitative research tests the hypotheses of specific research questions (Kara & Pickering, 2017). Research conducted using qualitative research methods is inclined to use exploratory research designs; in contrast, quantitative research methods use descriptive and casual research designs (Asroth, 2018). Lee & Son (2022) asserts that the researcher can choose to employ either qualitative research to obtain a broad understanding of the research problem, to discover the extent of the problem and how the problem impacts on reality, or quantitative research which answers research questions that require statistical data. According to Curwin & Slater (2014) research methods are an important guideline for the researcher in order to identify information accessible to them and to determine the extent to which the research problem requires numerical or non-numerical data.

Researchers in qualitative research have been found to be intimately involved in their research and in creating the results, unlike quantitative research where the researcher is not personally involved (Abowitz & Toole, 2010). This is supported by Lee & Son (2022) who found that researchers in qualitative research are subjective since the results of their research are dependent on them, whereas in quantitative research, the research is objective because the researcher relies on numerical data that cannot be changed. Mixed methods are a combination of quantitative and qualitative research methods deployed in studies that require a combination of numerical and non-numerical data to solve a research problem (Suan, Tan, Soelar & Ali, 2017). The combination of qualitative and quantitative research methods is useful to ensure that the researcher captures data of what people do and what they think and conducts an investigation of the research questions in different ways (Astroth, 2018). In this regard, it is important to distinguish between the three approaches to solve the research problem. Against this background, the study explores the various research methods and provides a comprehension of the chosen research method.

4.10.1. Comparing Qualitative and Quantitative Research

Qualitative research provides an opportunity for participants to share their life experiences; however, in quantitative research, the researcher does not get an opportunity to gauge the feelings and thoughts of participants regarding a particular topic or subject (Arseven, 2018). In qualitative research, the researcher seeks to attain multiple truths on the subject or topic under investigation, whereas quantitative research gives statistical reasoning (Amankwaa, 2016). A significant difference between both research methods is that quantitative researchers tend to work with quantitative methods to build a theory by developing hypotheses that can be tested. This can lead to the development of new theory and a focus on the implications of the empirical results (Farquhar, Ewing & Booth, 2011). The inflexibility of the quantitative method allows the researcher accurately to depict a comparison across all responses given by the participants (Arseven, 2018). Some researchers argue that it is difficult to avoid vagueness in qualitative research because the primary data is attained from participants who may have a certain level of biasness towards a particular topic due to their experiences (Flick, 2015). Compared to quantitative research, researchers have found that reliance on qualitative research methods is useful to get to the root cause of problems and to uncover how people experience things in real life (Astroth, 2018). Qualitative research is common where the study requires interaction with the participants.

The researcher begins by identifying a problem, collecting data, analysing that data, initiating the development of a theory, re-examining the data, and determining whether there is a need to collect more data (Bansal, Smith & Vaara, 2018). There are primarily five ways to distinguish quantitative and qualitative research methods (Mack, Woodsong, MacQueen, Guest & Namey (2013):

- Their analytical objectives.
- The types of questions that the researcher poses.
- The types of data collection instruments that the researcher opts to use.
- The forms of data that they produce.
- The degree of flexibility built into the research/study.

The fundamental dissimilarity between quantitative and qualitative research methods is flexibility (Arseven, 2018). Quantitative research may be inflexible because of the use of tools such as surveys and questionnaires (Flick, 2015). Where the researcher chooses to collect data through surveys and questionnaires, both methods are limiting in the sense that the researcher has to pose questions in the same order for all the participants, with no deviation (Poulton, Moffitt & Silva, 2015). In this study it was important to use a questionnaire to be able to quantify various aspects in order to provide an accurate and precise answer to the research question. Having said the above, both research

methods have an important role to play in answering research questions based on the topic explored. The advantage of using both methods in this study was to determine if there were similarities in the experiences of the participants who took part in the interviews, focus group and the questionnaire since the participants had differences in age, occupational levels and decision-making power. Taylor, Power & Smith (2020) provide an overview of the primary distinctions between quantitative and qualitative research. In qualitative research there a greater flexibility that allows for spontaneity between the researcher and the participants as the researcher is able to ask open-ended questions which do not need to be asked in a particular order. The participants are able to elaborate in their responses and can do so in greater detail than they would be able to do in a questionnaire where questions may merely require responses such as ‘yes’ or ‘no’. In qualitative research, the researcher has the opportunity to react immediately to the response given by the participants by posing further questions relating to the response received (Park, Yi & Jang, 2021).

Mixed methods research provides the researcher with an opportunity to interpret the combination of data using numbers (quantitative) and the investigation (qualitative) into complex behavioural, social and robust health human sciences (Pluye & Hong, 2013). This study was conducted using a mixed methods approach; hence the table below differentiates between quantitative and qualitative research in order to understand how the researcher navigated the research methodology of the study.

Table 4.1: Comparing Qualitative and Quantitative Research

| Qualitative Research | Research Aspect | Quantitative Research |
|----------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------|
| Discover ideas, used in exploratory research with general research objects | Common purpose | Test hypotheses of specific research questions |
| Observe and interpret | Approach | Measure and test |
| Unstructured, free form | Data collection approach | Structured response, categories provided |
| Researcher is intimately involved, results are subjective | Researcher independence | Researcher uninvolved, observer, results are objective |
| Small samples, often in natural settings | Samples | Large samples to produce generalisable results (results that apply to other situations) |
| Exploratory research designs | Most often used | Descriptive and casual research designs |

Source: Zikmund, Babin, Carr & Griffin (2013:135).

The researcher was mindful of the flexibility of the two research methods in that it should not be seen as an indication of how scientifically vigorous a certain method was compared to the other; rather the focus was on the researcher’s understanding of the research problem. In the light of the

above, it was beneficial to use both research methods to ensure that the study is reliable and valid. A blend of qualitative and quantitative research methods projects a holistic view of the impact of the fourth industrial revolution and millennials. The study used in-depth interviews as a qualitative method and a questionnaire which provided a statistical analysis of the data. Hence, through the use of interviews the study was able to capture responses from leaders who lead millennials and have an impact on decision making on issues related to the fourth industrial revolution. The millennials gave responses through a questionnaire to allow for quantification in order to make a determination on the leadership style that will integrate millennials and the fourth industrial revolution.

4.10.2. Quantitative Research

The quantitative approach to research involves using numbers to assist the researcher to define, illustrate and find a solution to a wide range of problems (Shugan, 2015). Researchers who choose quantitative studies adhere to a well-defined structure which includes the introduction, literature review, hypotheses, methods, results, and discussion (Bansal & Corley, 2012). Quantitative research addresses research objectives through an empirical assessment comprised of numerical measurement and analysis (Zikmund, Babin, Carr & Griffin, 2014). This type of research often entails the analysis of meanings in the form of an attitude scale (such as the Likert scale). In this study, a Likert scale was used in the questionnaire to measure the attitudes of the participants relating to a specific area of interest. Quantitative research can also be defined as distinctive research that entails the collection of numerical information and displays the relationship between theory and research as deductive, a predilection for a natural science approach, which is referred to as positivism (Asroth, 2018). Quantitative research should not only be viewed from a numbers point of view; the numbers must make sense and provide a solid background that gives meaning to the numbers and gives a relative depiction of numerical and non-numerical data (Curwin & Slater, 2016). Quantitative research methods broaden the construction of findings as well as providing a rounded and accurate opinion based on the human experiences of the participants (Flick, 2015). In quantitative research, the researcher cannot explicitly explore a topic and has no opportunity to ask follow-up questions to better understand the thoughts of the participant and how they give meaning to certain things related to the topic (Arseven, 2018).

The participants are inclined to respond to questions based on what has been asked, they cannot elaborate further on their reasoning, based on their life experiences and perceptions, because of the closed-ended or fixed questions (Arseven, 2018). In quantitative research, the researcher is able to develop theory at the front end by constructing a hypothesis that is then tested, thus allowing the researcher to include new theory at the front end and focus on the implications of the empirical results at the back end (Lueng, 2015). Researchers who use quantitative methods have the advantage

of referencing with well-known data sets and statistical tests (Levitt, Cresswell, Josselson, Bamberg, Frost & SaurezOrozco, 2018). In this study the use of quantitative research allowed the researcher to reserve the most crucial data for the back end which is supported by a strong discussion on the findings.

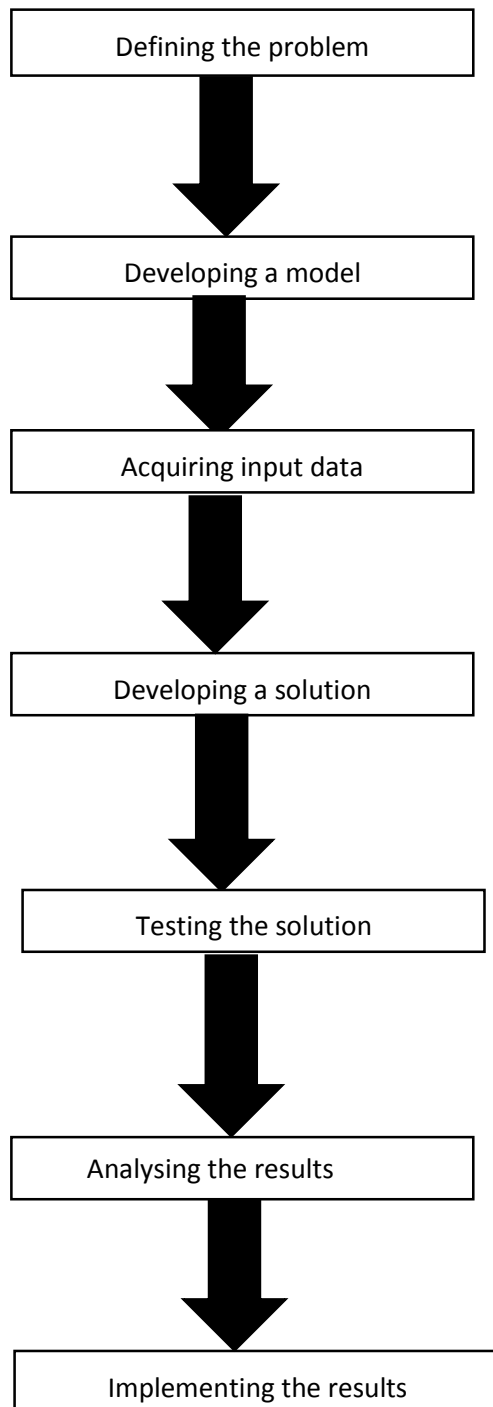


Figure 4.2: The Quantitative Analysis Approach

Source: Bryman & Bell (2011:151).

The data collected by a data collection method, such as a survey or questionnaire, can be summarised using a variety of tables, charts and calculated numbers (Flick, 2015). The numbers collated in quantitative research are referred to as statistics (Hong & Pluye, 2014). Quantitative data is presented in an ordered and meaningful manner (Arseven, 2018). This type of research allows the researcher to utilise data to identify and compare numbers (Cresswell, 2014). The calculations resulting from the accumulated numbers must be able to provide the researcher with descriptions from which probability can be developed (McDaniel & Gates, 2013). The use of quantitative research enables the researcher to develop a model or models that encapsulate the researchers thinking on a research problem. A model provides the researcher with a description of how a particular thing works (Curwin & Slater, 2016). The researcher can use the numbers collected in quantitative research to solve a research problem on three levels, namely:

- To describe a wide variety of situations, particularly when large quantities of data are involved. At this level, the researcher explores statistics such as the mean and standard deviation to identify typical values and the spread of values.
- To allow the use of theory. Theory becomes useful to the researcher in that it emphasises that measurements follow a normal distribution or that a trend is important in statistical terms.
- To develop models (representations) of real problems and to use these models to identify solutions.

A model is able to define how something will work.

4.10.3. Qualitative Research

Qualitative research is often useful in studies that require the researcher to interpret people's behaviour in relation to their norms and values and the culture of their particular group or organisation (Arseven, 2018). Researchers who choose a qualitative approach develop a narrative that contains current and emergent theory (Stahl, Lampi & King, 2019). In this study, the use of exploratory research (qualitative methods) allowed the researcher to arouse the participants to share their responses in a manner that revealed the significance of a particular topic to the participants, thus providing answers that were meaningful and explanatory and allowed the researcher to flesh out more substance from the answers. The participants were free to express their responses in their own words thus empowering them to give meaning to their life experiences and their perceptions on the topic. Hence, in this study the use of qualitative methods was advantageous because it enabled the researcher to ask questions such as how and why in response to the answers given by the

participants (Lee & Son, 2022). The researcher was able to probe deeper to understand why the participants felt a particular way when answering certain questions. The benefit of using qualitative research was that the researcher was able to gauge from the participants' responses and from reading their body language how strongly they felt about a particular topic, and to probe further if necessary. Studies have shown that qualitative research relies on a variety of techniques (Zikmund, Babin, Carr & Griffin, 2013):

- Phenomenology -- originating in philosophy and psychology.
- Ethnography -- originating in anthropology.
- Grounded theory -- originating in sociology.
- Case studies -- originating in psychology and in business research.

Table 4.2: Common Qualitative Research Tools

| Tool | Description | Type of approach (Category) | Key advantages | Key Disadvantages |
|-----------------------|-----------------------------------------------------------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Focus group interview | Small group discussions led by a trained moderator | Ethnography, case studies | <ul style="list-style-type: none"> • Can be done quickly • Gain multiple perspectives • Flexibility | <ul style="list-style-type: none"> • Results dependent on moderator • Results do not generalize to larger population • Difficult to use for sensitive topics • Expensive |
| Depth Interviews | One on one, probing interview between a trained researcher and a respondent | Ethnography, grounded theory, case studies | <ul style="list-style-type: none"> • Gain considerable insight from each individual • Good for understanding unusual behaviours | <ul style="list-style-type: none"> • Result dependent on researchers' interpretation • Results not meant to generalize • Very expensive |
| Conversations | Unstructured dialogue recorded by a researcher | Phenomenology, grounded theory | <ul style="list-style-type: none"> • Gain unique insights from enthusiasts • Can cover sensitive topics | <ul style="list-style-type: none"> • Easy to get off course • Interpretation are very researcher dependent |

| | | | | |
|--------------------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| | | | <ul style="list-style-type: none"> • Less expensive than depth interviews or focus groups | |
| Semi-structured interviews | Open-ended questions, often in writing, that ask for short essay-type answers from respondents | Grounded theory, ethnography | <ul style="list-style-type: none"> • Can address more specific issues • Results can be easily interpreted • Cost advantages over focus groups and depth interviews | <ul style="list-style-type: none"> • Lack the flexibility that is likely to produce truly creative or novel explanations |
| Word Association/Sentence completion | Records the first thoughts that come to a consumer in response to some stimulus | Grounded theory, case studies | <ul style="list-style-type: none"> • Economical • Can be done quickly | <ul style="list-style-type: none"> • Lack the flexibility that is likely to produce truly creative or novel explanations |
| Observation | Recorded notes describing observed events | Ethnography, grounded theory, case studies | <ul style="list-style-type: none"> • Can be unobtrusive • Can yield actual behavior patterns | <ul style="list-style-type: none"> • Can be very expensive with participant-observer series |
| Collages | Respondent assembles pictures that represent their thoughts/feelings | Phenomenology, grounded theory | <ul style="list-style-type: none"> • Flexible enough to allow novel insights | <ul style="list-style-type: none"> • Highly dependent on the researchers interpretation of the collage |
| Thematic apperception/cartoon tests | Researcher provides an ambiguous picture and respondent tells about the story | Phenomenology, grounded theory | <ul style="list-style-type: none"> • Projective, allows to get at sensitive issues • Flexible | <ul style="list-style-type: none"> • Highly dependent on the researchers interpretation |

Source: Zikmund, Babin, Carr and Griffin (2013, 141)

The significance of the qualitative method is that it provides a solid foundation of the facts in the study and enables the researcher to uncover opinions and perceptions that are unique and nonlinear (Bansal, Smith & Vaara, 2018). Qualitative methods allow the researcher the opportunity to expand

their methods of collecting data through the use of interviews and to employ flexible techniques to analyse data (Batt & Kahn, 2021). In order to ensure the trustworthiness of the data in this study the researcher used qualitative methods to have a detailed account of the data collected whilst ensuring that the data obtained was credible and reliable. The researcher examined the depth of the human experience and the thoughts of the participants. Heyink & Tymstra (2011) argue that qualitative research can be vague because of the use of soft data acquired from individuals who may be biased in their responses during interviews. In this study vagueness was overcome by further probing to gain a better understanding of why a participant had given a particular response, thus ensuring greater substance to their responses.

4.10.4. Mixed Methods

Mixed methods research is a combination of quantitative and qualitative data to answer a research problem (Sligo, Nairn & McGee, 2017). According to Ewing, Booth & Farquhar (2011) mixed methods research has become a popular research method to tackle complex research questions to gain an in-depth understanding of a problem. Mixed methods research can be used for triangulation and/or corroboration, elaboration or clarification, obtaining contradictory or new perspectives from other methods, and/or expansion of the breadth and range of the investigation (Bryman & Bell, 2011). Research conducted using mixed methods is able to combine various components of knowledge, skills and disciplines (Asroth, 2018). Researchers who choose mixed methods research have the intention of gaining a full understanding of the subject investigated (Bansal, Smith & Vaara, 2018).

4.10.5. Reasons for Using Mixed Methods Approach

In this study a mixed methods approach was used to assess the readiness of the Ethekewini Municipality to integrate millennials and the fourth industrial revolution and to determine the leadership style required to integrate both millennials and the fourth industrial revolution. Mixed methods research was relied on to combine quantitative data collected from millennials between the ages of 18 and 35 with qualitative data collected from a smaller number of leaders in managerial and decision-making positions and millennials who participated in a focus group to supplement the responses provided in a questionnaire. The researcher used quantitative and qualitative methods to determine from the leaders and employees (regarded as millennials) the various aspects that have an impact on the readiness of the municipality to integrate the fourth industrial revolution and millennials. Qualitative research was used to understand from the leaders and millennials the challenges they face in the organisation as a result of the emergence of the fourth industrial revolution and millennials. The leaders in the municipality were interviewed through the use of semi-

structure interviews. The data collected from the participants was used to develop theories and a hypothesis was formulated. Quantitative methods were used to test the hypothesis, which measured the extent to which the municipality is using the opportunities presented by the fourth industrial revolution and millennials. The employees of the municipality completed a questionnaire that required information to determine the readiness of the municipality to integrate the fourth industrial revolution and millennials, to determine the impact of the fourth industrial revolution on the workplace and the leadership style required to integrate millennials and the fourth industrial revolution. To ensure the authenticity of the employees who participated in the study, the questionnaire included a question requesting that participants state their ages to ensure that they were millennials.

4.11. Data Collection Methods in Qualitative Research

In this study data was collected through the use of in-depth interviews and a questionnaire. The most common methods of collecting data in qualitative research are interviews, observation and focus groups (Mack, Wood, MacQueen, Guest & Namey, 2017). Interviews were appropriate in this study in order to ensure that the detailed answers given to the research questions revealed the reality of the emergence of the fourth industrial revolution and millennials within the municipality. There are advantages in relying on focus groups because the researcher is able to stimulate the generation of new ideas and can explore data based on the cultural norms of a group, generating a wide overview of issues of concern to the cultural group represented in the research (Johnson, 2019). However, in this study the researcher preferred to use one-on-one interviews to elicit authentic responses based on the real-life experiences of the participants. Observation as a research tool assists the researcher in collecting data based also on the behaviour and characteristics observed from the participants (MacDaniel & Gates, 2014). In this study in-depth interviews were beneficial to explore the participants' personal histories, perceptions, perspectives and experiences. Three methods of recording qualitative data were utilised – field notes, audio recordings and transcripts – which were relevant for the researcher to generate certain outcomes (Lee & Son, 2022).

4.11.1. Interviews

Ethical clearance (Appendix 1) was obtained from the University of KwaZulu-Natal Research Office. A written consent form, which explained in detail that their participation was voluntary, was provided to the participants. The participants were requested to indicate their language preference to ensure that they were comfortable with answering the questions the researcher posed to them. To gain their trust, they were informed why their input was required by explaining the broader context of the topic. The researcher gained the trust of the participants by explaining that the interviews

would ensure that the researcher gained a true picture of conditions in the workplace in order to meet the research objectives. The participants were assured that the information gathered during the interviews would be kept confidential. They were further assured that the information gathered in the interview was for the purpose of the study only and would not be discussed with anyone. The participants were informed that coding would be used to protect their demographic information divulged during the interview. The researcher responded to clarity-seeking questions by the participants to ensure that they fully understood the questions before answering them (Shamim, Shuang, Hongnian & Yun 2017). Semi-structured interview questions were used to ensure that the researcher had the flexibility to probe the answers given by the participants in order to gather authentic and reliable data. During the interviews the participants shared with the researcher how they appreciated being given an opportunity to share stories of their experiences working with the old (leaders) and new generation (millennials) at the municipality.

The researcher made the participants aware that the topic discussed could evoke strong feelings and handled those situations with sensitivity. MacDaniel & Gates (2016) assert that unstructured one-on-one interviews are beneficial to the researcher since they allow for probing questions to elicit detailed answers to questions using non-directive techniques to expose hidden motivations. As the interviews unfolded, the researcher thoroughly probed each response and used the replies as a basis for further questioning.

The use of in-depth interviews has advantages and disadvantages as a qualitative research tool (MacDaniel & Gates, 2013).

4.11.1.1. Advantages of In-depth Interviews

- Group pressure is eliminated, the respondent reveals honest feelings, not necessarily those considered the most acceptable by their peers (Rost, 2021). The interviews were conducted face to face, and the participants could speak freely and openly.
- The personal one-on-one interview provides the respondent with the assurance of being the focus of the researcher's attention. This gives the respondent a sense of importance since their thoughts and feelings are being considered (Lueng, 2015). The researcher made sure that eye contact was maintained with the interviewee and there was constant interaction with the participants.
- The respondent is given an elevated state of awareness due to the constant interaction with the researcher (McLaughlan, 2019). The researcher asked probing questions if the need arose to assure the interviewee that the researcher was engaging meaningfully.

- The researcher has an opportunity to obtain new information from the respondent since they are in the presence of the researcher for a longer period of time (Hou & Fetters, 2019). The researcher asked follow-up questions which helped the researcher gather more information relevant to the study.
- The researcher has enough time to probe the respondent to reveal the feelings and motivations underlying their statements on the topic (Dickson & Page, 2021).
- In-depth interviews are beneficial to the researcher because they allow for greater flexibility to further probe casual remarks made by the respondent which may provide critical insights on the main issue or a problem/situation (Shannon-Baker & Edwards, 2018). In instances where the participants made remarks, the researcher was able to probe further to get more information.
- The researcher is able to be sensitive to nonverbal feedback and may have an opportunity to probe the respondent (Gaete, 2019).
- The respondent has the opportunity to openly share their viewpoints without the influence of other people; they have the opportunity to express their true feelings without reservation (Venkatesh, Brown, Yulia & Sullivan, 2016). The researcher assured every participant that they could speak freely without reservation because all information acquired was confidential and would not be published without the participant's consent.
- The interview can be conducted at a place that suits the respondent (Astroth, 2018). All the interviews were scheduled prior to the interview date and the venue was set up according to the respondent's preference.
- A further advantage of choosing an in-depth interview compared to a focus group is that the respondent does not have any competition when answering questions (Schoonenboom, 2018). The respondents were able to speak freely without having reservations that a third party was listening to them.
- In-depth interviews are beneficial if the objective is to understand decisions made by individuals and how individuals respond to certain situations (Flick, 2015).

In-depth interviews are useful if the study is sensitive or very detailed and requires probing to elicit important facts on the topic (Court & Molesworth, 2016).

4.11.1.2. Disadvantages of In-depth Interviews

- Conducting in-depth interviews can be expensive compared to focus groups (Chingwe & Makuwira, 2018). The researcher did not incur any costs for conducting in-depth interviews.
- In-depth interviews usually do not allow sufficient participation such as a focus group since it is sometimes impossible to get participants to sit in a group during in-depth interviews to get a different perspective and a holistic view of a situation or problem (Flick, 2016). The researcher chose the in-depth interviews to allow the participants' time to express themselves fully in a secure and comfortable venue that they were familiar with.
- In-depth interviews are not able to cover as much information in one day as focus groups can because they can be exhausting and lead to loss of focus (Creswell & Plano Clark, 2011). The interviews were not too long, and the majority of the interviews were recorded in less than two hours.
- In-depth interviews are unable to provide opportunities for point-counterpoint discussions and resolutions (Flick, 2015). To overcome this disadvantage, a focus group was also utilised in the study which created a good balance for capturing point-counterpoint discussions.
- In-depth interviews are unable to obtain reactions and dynamics of a group in one session to allow for diverse views from respondents affected by the same problem (Hou & Fetters, 2018). In the focus group the researcher was able to obtain reactions from the group on certain aspects that the participant felt strongly about which were discussed at length with the participants.

In the interview process the researcher must be aware of any potential biases to ensure that the data collected during interviews is reliable. The following biases were identified by Doody & Noonan (2013):

- The respondent may respond to questions to please the researcher.
- The respondent can present an official point of view rather than their personal view of a situation by giving responses that the researcher wants to hear.
- The respondent's desire to impress the researcher with their knowledge may lead to the participant not providing honest answers.
- The respondent may give a response for the sake of answering a question even if they do not understand or have nothing to contribute to the research topic.

- The respondent may be influenced by the researcher's expression of surprise or disapproval during the interview.

In qualitative research interviews are regarded as a vigorous tool to understand respondents and their thoughts on a particular subject (Flick, 2015). Lueng (2015) supports the view that interviews have been the most frequently used form of data collection. Interviews have been found to provide accurate and reliable information based on the participant's own life experiences and the fact that audio recordings are unlikely to be edited (Kara & Pickering, 2017). In this study, the researcher allowed the participants to express their opinions to gain a better understanding on the different views that fellow employees had on the topic. The advantage of using qualitative methods was that the participant had the opportunity to selfreflect on how millennials and the fourth industrial revolution impact the day-to-day operations within the municipality. The disadvantage of using interviews to gather data was that they were time consuming because of the sample size and tight work schedules.

4.12. Focus Group

A focus group (Appendix 3) was included in the latter part of the study because of the interruption of data collection from the questionnaire as a result of the Covid-19 pandemic. The focus group was targeted for millennials who were not able to complete the questionnaire distributed electronically before the announcement by the President of South Africa of the national shutdown which led to the lack of resources for the millennials to complete the questionnaire. The researcher chose the focus group to supplement the data collected from the millennials through the questionnaire to ensure that the study provided a balanced review from the millennials within the Ethekwini Municipality. This was to warrant that the study is credible, trustworthy and reliable. The focus group was the preferred data collection method to gather additional information on the millennials' experiences within the organisation in relation to themselves as a young generation and the integration of the fourth industrial revolution within the organisation. The primary purpose of utilising a focus group was for the researcher to have a conversation with the millennials on the topic and gauge from them what their opinions and experiences were on the research topic. The focus group lasted for two hours which allowed the researcher sufficient time to obtain all the information required to present equitable findings. The focus group was audio recorded electronically on the Google Meet cloud and the researcher followed a semi-structured interview process. Once the discussion on the focus group was complete, the audio recordings were transcribed and subsequently analysed. Thematic analysis was done using coding for and the theme emerged from identifying similar responses given by the participants. Focus groups are described as planned dialogues within a group which involve an interactive exchange of views about individual experiences, preferences, feelings and attitudes

(Arseven, 2018). The primary objective of conducting a focus group is to produce diverse critical insights into a particular topic/subject which may not be achieved through a face-to-face interview. The focus group gave the participants an opportunity to interact in a group on the topic based on their experiences at the Ethekewini Municipality. The participants were given an opportunity to share different opinions on the topic and in some instances agreed and disagreed with the views shared by fellow participants, which gave the researcher a chance to ask more clarity-seeking questions. A focus group was chosen by the researcher to afford participants an opportunity to share their comprehension, credence and experiences in a group discussion which was influenced by their individual concerns and preferences relating to a particular topic/subject (Korri, Hess, Froeschl & Ivanova, 2021).

Focus groups are known to be flexible and allow participants reflexivity in the course of the description and interpretation of their individual opinions and suppress the possible bias of the researcher (Lee & Son, 2022). The uniqueness of focus group discussions in qualitative research is the engagement among the participants which allows the same or diverse opinions to emerge from the discussion and provides the researcher with a substantial interpretation of the contributions made by the participants (Kulkarni & Dandekar, 2019). Focus groups are preferred by younger participants to face-to-face interviews since they are informal and less intimidating (Otten & Augustin, 2021). However, Armadans-Tremolosa, Guilera, Las Heras, Castrechini & Selva-O'Callaghan (2021) argue that the major disadvantage of focus groups is that some participants may not be comfortable to share their individual views on a topic in front of their peers who may have varying views. An additional advantage of utilising focus groups in qualitative research is that control is shifted from the researcher to the participants and provides participants with a chance to delve deeper into other conversations linked to the topic which the researcher may not have anticipated (Sharma, Traeger, Tcharkhedian, Harrison, Hersch, Pickles, Harris & Maher, 2021).

The researcher found the discussions among the participants in the focus group useful because responses given by a particular participant triggered the memories of others, and the responses seemed common based on the millennials' experiences in the municipality. Visser, Oudsten, Traa, Gosens & De Vries (2020) argue that focus groups may be a disadvantage since they may not represent the target market and anonymity may be compromised leading to participants not being honest in their responses. The researcher eliminated the possible risk to anonymity by ensuring that the participants signed a consent form and the researcher explained that participation was voluntary. Before commencing the focus group the researcher explained to the participants that they would be in a group with other millennials to ensure that they were comfortable to continue with the discussion.

4.13. Ethical Considerations

Ethics guided the researcher throughout the study to guarantee that the researcher conducted the research in an ethical manner. The researcher ensured that confidentiality, privacy and anonymity were safeguarded. The researcher was obligated from an ethical point of view not to disclose the names of the participants and their involvement in the study. All the participants were given consent forms which were explained to them prior to the interview scheduling to ensure that the participants voluntarily participated in the research. The consent form (Appendix 5) was used primarily to advise the participants on the nature of the study, their involvement in the study and the possible consequences of the study. The researcher advised the participants that the research would be published upon completion, to ensure that they had no personal reservations. Confidentiality in the research context is a declaration from the researcher that the information gathered from participants is only for research purposes (Lueng, 2015). In this study, the researcher made the participants aware that the only people who would have access to the data gathered would be the researcher and the supervisor. The researcher informed the participants that the data gathered for the study would be kept in a secure place at the university and that the personal information of the participants would be safeguarded. The researcher explained that the data collected would not be disclosed by using any features that might identify which response was given by which participant. A researcher must ensure that confidentiality is maintained by offering the participants the option not to disclose their personal details (Hadi, Alldred, Closs & Briggs, 2014). Hence, in this study, the researcher coded the respondents to maintain confidentiality during the research and in the results.

To ensure that the participants were comfortable, the researcher gave them the option to choose the location where the interviews would take place to ensure that they were free to express themselves privately. An informed consent form is a document specifying the participant's understanding of what the research entails and the expectation of the researcher from them (Quinlan, Babin, Carr & Griffin, 2015). The informed consent form details the participant's willingness to participate in the study and advises them of their right to withdraw their participation at any stage of the research. The researcher was impartial throughout the data collection process. Thornhill, Saunders & Lewis (2016) state that a researcher must collect data precisely without being selective of the information that will be recorded and used for data analysis to guarantee that the study is valid and reliable. In this regard, the researcher must not misrepresent the data collected during the interview stage. The researcher is expected to be ethical from the minute the researcher decides to conduct the study until the research is finalised. Prior to conducting interviews in this study, the researcher obtained an ethical clearance certificate (protocol reference number: HSS/2176/018D) from the University of KwaZulu-Natal's research office to conduct the study (Appendix 1). A gatekeeper's letter was obtained from the

Ethekewini Municipality granting permission to conduct the study through the municipality (Appendix 2). Once both letters were obtained the researcher telephonically contacted the participants to schedule the interviews and set up meetings on their email calendars. In the case of the questionnaire that was sent to millennials, they were informed of their right to participate in and withdraw at any stage of the study through electronic mail. A study information sheet (Appendix 3) and the informed consent (Appendix 4) form were sent to the participants prior to the interviews commencing. The topic, purpose and data collection management were incorporated in the information sheet. All the participants were advised prior to obtaining their consent that all interviews would be recorded. All participants were comfortable with being recorded during the data collection stage. Interview questions (Appendix 5) were created based on the objectives of the study and the literature that was used in the study. The questionnaire (Appendix 6) comprised of a variety of questions that aimed to answer the research questions which comprised of four sections.

The researcher started data collection with the interviews with the leaders, the questionnaire was sent out simultaneously as a pilot to test functionality and to ensure that the participants were able to access the electronic questionnaire and to check the feasibility of the time allocated. The pilot study was successful, and the participants were able to access the survey and confirmed understanding the terminology used in the questions. The researcher conducted a pilot of the questionnaire to ensure that millennials understood the topic and to make certain that the facilitation of the questionnaire was done efficiently considering that it was conducted electronically. The pilot included millennials from different departments, and the researcher also considered a balance between gender, management experience and location. The researcher obtained a list of the millennials who had access to the internet and email from the Human Resource Department. The questionnaire targeted a sample of 20 millennials who had access to the internet to determine whether the participants had the necessary resources, because some millennials, although graduates, did not have access to computers. The researcher gave those participants the option to use their smartphones to complete the questionnaire; this ensured that the questionnaire was also accessible to participants who wished to complete the questionnaire on their smartphones, relying on the municipality's stable internet connection. The questionnaire (Appendix 6) was sent via electronic mail to participants who had access to email and the internet.

The participants who participated in the questionnaire were given definitions of all the concepts pertinent to the study to ensure that they understood the questions that were posed. The questions were designed for the participants to give responses that would provide the researcher with insight into the challenges from their perspective on the impact of leadership in the workplace, the fourth industrial revolution and the emergence of millennials in the municipality. The intention of the

researcher was to gauge the understanding of the topic by the potential target group. Semi-structured interviews gave the researcher the flexibility to probe more from the participants' responses. All the participants were given the same treatment and questions were asked in the same sequence. The researcher did not share their own views in the topic during the interviews. The study added a focus group in the light of the disruption of the collection of data through the questionnaire following the outbreak of the Covid-19 pandemic. The questions developed for the focus group (Appendix 7) were kept by the researcher and shared during the discussion with the participants identified as millennials based on their age which was instrumental in selecting them to participate in the study. A total of six (6) millennials participated in the focus group which was conducted online through the Google Meet platform. The participants preferred to participate in the focus group using their smartphones because most of them were working remotely during the Covid-19 pandemic. As mentioned above, the focus group was included to ensure that the study maintained its credibility when it became clear that the millennials would not be able to complete the questionnaire because of a lack of resources during the Covid-19 pandemic. The participants in the focus group were advised in advance of the scope of the study and all participants were given a consent form and the researcher established that the participants were comfortable to engage on the topic.

During the data analysis stage, the researcher eliminated bias by ensuring that the responses provided by all the participants were reported authentically, including both negative and positive comments on their experiences within the Ethekewini Municipality. Coding was used to ensure anonymity instead of using the participants' names which was also part of the informed consent that the participants signed prior to participation. The researcher ensured that none of the information gathered from the questionnaire and the interviews was disclosed. The researcher did not falsify any information received from the questionnaire and the interviews.

4.14. Data Collection Methods in Quantitative Research

In quantitative research data is gathered through the use of questionnaires and surveys which do not require any face-to-face interviews or human interaction. These methods of collecting data are not popular since there is no human interaction; no one is present to explain to and probe the participants on the topic (Arseven, 2018). In this study a questionnaire was used to gather data from millennials. A questionnaire is defined by MacDaniel & Gates (2015) as a set of questions intended to gather information pertinent to accomplish the objectives of a study and is also described as an interview schedule or survey instrument. In this study the questionnaire was selected as a data collection tool to standardise the wording and sequencing of questions to create uniformity in the data collection process. The intention of the researcher was to ensure that each participant had sight of the same words and to ensure that all participants were exposed to the same sequence of questions, thus

ensuring reliability. The researcher was aware that without standardisation of questions to ensure that, when the data was analysed, the information was in sequence and accurately reflected the responses given for each question. A questionnaire must translate its objectives into a form that is understandable for the participants and must enable the researcher to extract the necessary information needed for the study (Arseven, 2018). The questionnaire must capture responses in a form that has the potential of being easily tabulated and translated into findings and recommendations that will satisfy the researcher's requirements (Lueng, 2015). In designing the questionnaire in this study, the researcher took into consideration the following factors identified by MacDaniel & Gates (2013):

- The questionnaire must provide information that can be used by organisations to make decisions and provide solutions.
- The researcher needs not only to consider the topic and the type of respondent required to provide information, they should also consider the interviewing environment and the length of the questionnaire.
- The questionnaire must be designed to suit the needs of the targeted respondents.
- The questionnaire must be free of any jargon and use everyday language that can be understood by the respondents.
- Once the researcher has collected the data, it has to be coded for data analysis. The researcher needs to be mindful of how the responses will be coded from inception of the questionnaire.
- The questionnaire must be edited to ensure that skip patterns are followed and the required questions are completed.

Questionnaires have an important role in the research process. The following figure illustrates how questionnaires contribute to the research process:

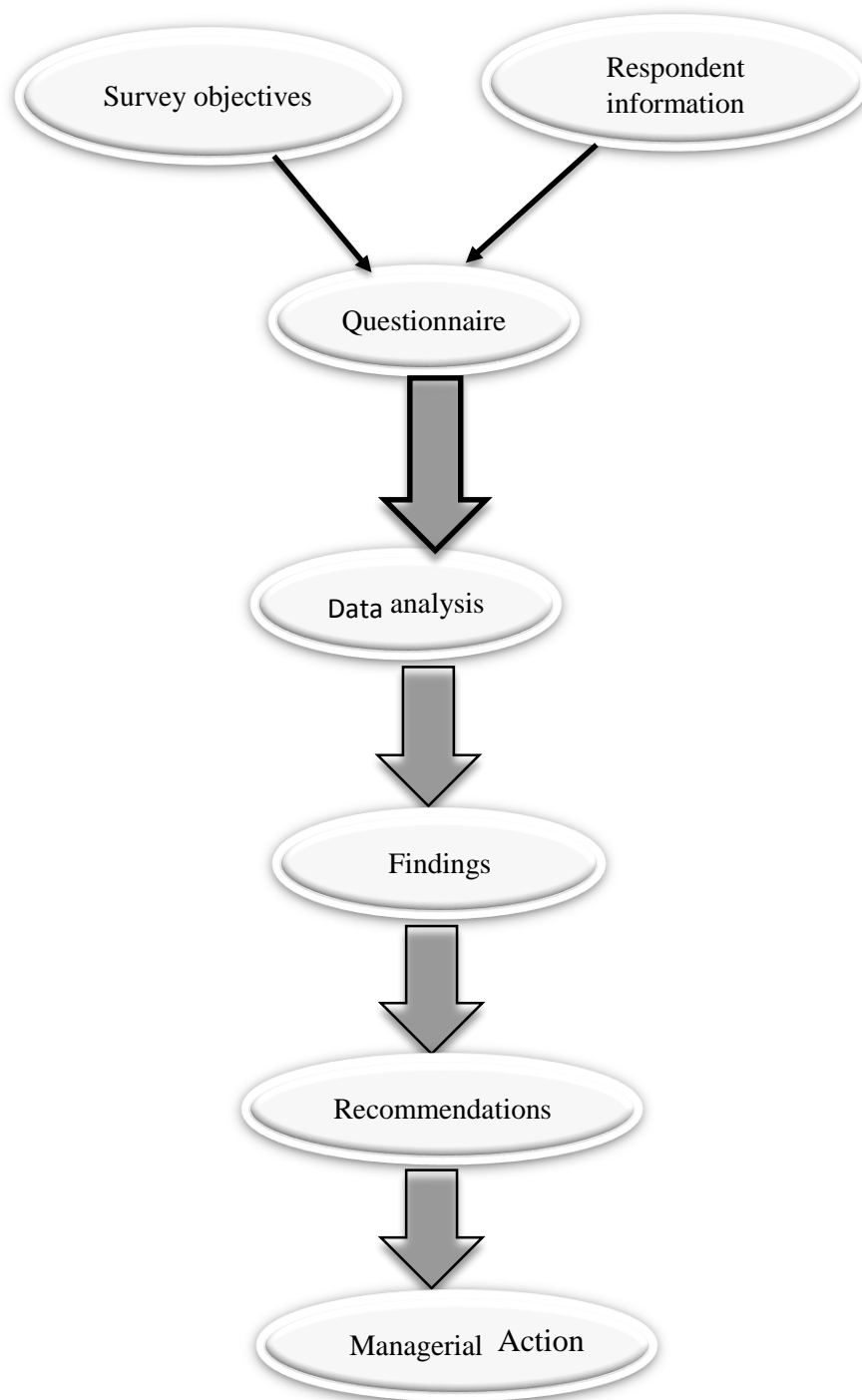


Figure 4.3: Role of Questionnaire

Source: MacDaniel & Gates (2013:336).

4.14.1. Questionnaire Design Process

The researcher followed a series of logical steps when designing the questionnaire. The type of questions was critical to the design of the questionnaire to ensure that the research objectives of the study were achieved. MacDaniel & Gates (2013) provide a detailed overview of the questionnaire design process depicted in the figure below:

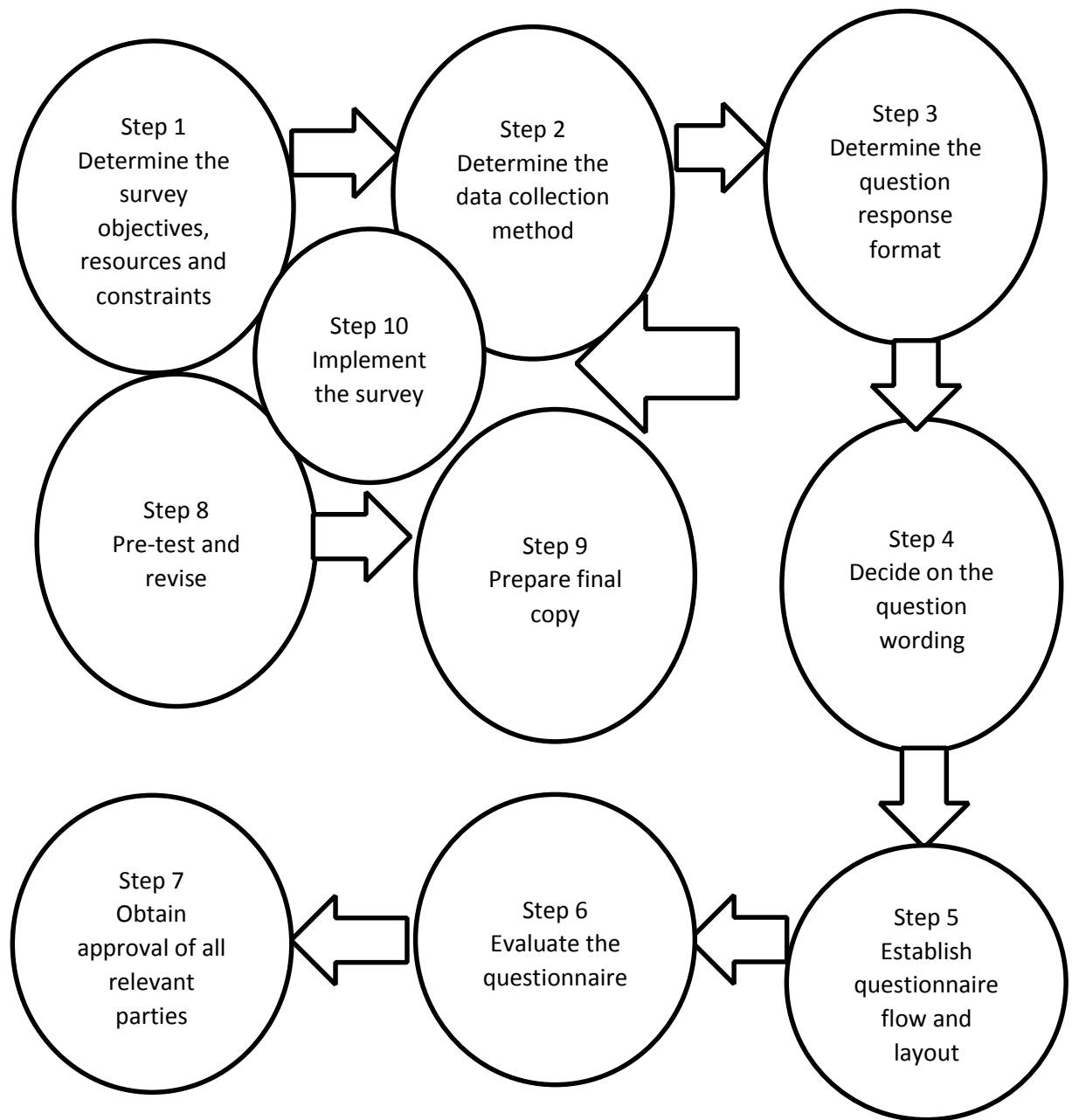


Figure 4.4: Questionnaire Design Process

Source: MacDaniel & Gates (2013:341).

4.14.2. Types of Questions Used in a Questionnaire

An important aspect of the questionnaire and how the participants will respond to it is the type of questions the researcher poses. In this study, the participants were young, and it was likely that they would not want questions that required them to give long answers. During the pilot, the researcher had a meeting and engaged the participants on the type of questions they were willing to answer and the preferred structure of the questions. The responses received from the participants indicated that they preferred closed-ended, dichotomous, scaled-response and multiple-choice questions since they

had limited time during working hours. The questionnaire was designed to cater for the preferences of the participants because some of them indicated that they had a short concentration span and did not want to answer open-ended questions. The pilot was intended to ensure that the researcher received sufficient responses; therefore, the participants were given an opportunity to provide the researcher with the insight into the possible challenges that could lead to a low number of responses.

4.14.2.1. Open-ended Questions

Open-ended questions require the respondents to reply in their own words. The researcher during the design of the questionnaire does not limit the choices of the responses. Open-ended questions are advantageous in that the respondents are given the opportunity to provide their reaction to the question. In this study, open-ended questions were not applicable owing to the preferences of the targeted participants and the objectives of the study (Flick, 2015).

4.14.2.2. Closed-ended Questions

Closed-ended questions require the respondents to select from a list of responses/answers. The primary advantage of using closed-ended responses is the avoidance of participants having to elaborate on their responses which can be frustrating for them. This type of questioning eliminates the researcher's bias. The coding in the questionnaire is much easier since it can be done automatically as soon as the researcher receives the responses (MacDaniel & Gates, 2014).

4.14.2.3. Dichotomous Questions

Dichotomous questions are closed-ended questions that require the participants to choose between two answers. It is easy to administer dichotomous questions and to tabulate them and they provide factual responses (Zikmund, Babin, Carr & Griffiin, 2013).

4.14.2.4. Multiple-choice Questions

Multiple-choice questions are close-ended questions; the participants are required to give one alternative that accurately expresses their opinion. These questions do not require coding since the answers provided reflect the alternatives of the participant immediately, no probing is required (Clough & Nutbrown, 2013).

4.14.2.5. Scaled-response Questions

Scaled-response questions are designed to capture the intensity of the respondents' feelings/thoughts. They are ordinal in nature and the scaling permits measurement of the concentration of the responses from the participants. The scaled responses include numbers that can be coded directly (Bell, Bryman, Dos Santos, Du Toit, Hirschsohn, Masenge, Van Aardt & Wagner, 2016). MacDaniel & Gates (2014) are of the opinion that questionnaires are advantageous in studies

that require responses from participants to quantify data and reach a particular conclusion. If the researcher wishes to gain a deeper understanding of a situation or problem, questionnaires and surveys are not ideal since the researcher cannot seek any clarification from the participants. In quantitative research methods the researcher has to consider the length of the questionnaire and the average time it will take to complete the questionnaire which may impact on the willingness of participants to answer the questionnaire (Flick, 2015). The questionnaire must be structured in a way that takes into consideration the industry and nature of work of the participants to minimise time spent (Bryman & Bell, 2011). The average times participants want to spend answering a questionnaire are as follows (MacDaniel & Gates, 2013):

- Less than 2 minutes 2%
- 2-5 minutes 21%
- 6-10 minutes 44%
- 11-15 minutes 21%
- 16-25 minutes 3%
- 26 minutes 0%
- No ideal length 8%
- Not sure 1%.

The researcher during the pilot tested the average time using a stopwatch and requested the participants to also take note of the average time they spent to complete the questionnaire, which was 2-5 minutes. The researcher used an electronic platform to send out the questionnaire. The participants were informed beforehand that they would be receiving the questionnaire in their mailboxes to avoid a low response rate. The researcher requested the officials of the municipality to provide the researcher with a list of all employees between the ages of 18-35. The structure of the questionnaire was determined by the extent to which it followed a set sequence or order, and the wording of the questionnaire was predetermined and utilised close-ended questions, such as multiple-choice questions (MacDaniel & Gates, 2014). As mentioned above, the fundamental difference between a structured and unstructured questionnaire is the deviation of a set pattern when creating questions. In this study structured questions were asked using the Likert scale. The intention of the researcher was to quantify the responses received from the participants. The questionnaire was sent to the participants through the use of the internet. The results from the questionnaire were received quickly due to its length and the fact that the participants felt that the topic was relevant to their current frustrations. Zikmund, Babin, Carr & Griffin (2013) identified a number of advantages and disadvantages the researcher needs to consider when selecting online questionnaires:

4.14.3. Advantage of Online Questionnaires

- Real-time reporting: The questionnaire can be distributed to participants simultaneously, fast tracking the responses from the participants (Lueng, 2015).
- Reduced costs: The average cost of using online questionnaires is 25-40% less than other methods of data collection (Flick, 2015).
- Ready personalisation: Online questionnaires are personalised for them to become relevant to each participants' own situation, hence speeding up the response time (Taylor, Power & Smith, 2020).
- High response rate: The questionnaires take less time to complete and are completed at the participants' convenience, whether during or after working hours (Lueng, 2015).
- Ability to contact the hard-to-reach: Participants such as doctors, engineers and high-income professionals are usually difficult to contact because of the nature of their jobs. The online questionnaire is advantageous because such participants can complete the questionnaire anywhere and anytime using various electronic devices (Creswell, Klassen, Plano, Clark & Smith, 2011).
- Simplified and enhanced panel management: The online questionnaires are internet panels linked through the internet and have the advantage of providing feedback, accurately reporting of the results (Creswell, Plano & Clark, 2018).

4.14.4 Disadvantages of Online Questionnaires

- Unresponsive participants: Some participants may forget to complete the online questionnaire, and this requires the researcher to follow up, unlike face-to-face interviews where the participant cannot delay the interview since it is pre-scheduled (Arseven, 2018).
- Loss of data: Online questionnaires have the potential to lose data especially in cases where the questionnaire is developed on the web (Lueng, 2015).
- Protection of data on the internet: The risk exists of other people accessing the questionnaire on an online platform and completing the questionnaire without being selected to participate (Jiang, 2018).

The researcher took into consideration the disadvantages of online questionnaires and created the questionnaire on a protected web linked to the researcher's email address. The researcher was the only person who had access to the questionnaire as it was password-protected. The researcher was the only person who could send the questionnaire to the selected participants and the questionnaire

was designed to add the participants' email addresses for identification. To prevent any person who was not on the list of participants from answering the questionnaire, the researcher highlighted the names of the participants, thus ensuring that there were no duplications and avoiding unauthorised participation.

To create a positive experience for the participants, MacDaniel & Gates (2015) assert that the researcher has to take into consideration the following:

- The use of language must be more conversational and less research intensive. The questions must be simplified to allow participants to understand them (Pluye & Hong, 2013).
- The researcher must be sincere to participants about the amount of time required to complete the questionnaire (MacDaniel & Gates, 2015).
- The researcher must construct questions that allow the participants to provide open-ended responses and express themselves freely (Hou & Fetters, 2018).
- The researcher must avoid the overuse of the word other or neutral, this may alter the results of the study since the researcher will not get a true reflection of the participants' opinions (Jiang, 2018).
- The researcher must ensure that the time taken to complete the questionnaire does not exceed 20 minutes (MacDaniel & Gates, 2015).
- The participants must be provided with progress information as they advance through the questionnaire (Jiang, 2018).
- Graphics must be used where possible to ensure that the participants are engaged when completing the questionnaire (Jiang, 2018).
- Ways to create interaction between the researcher and the participants must be explored to allow for clarity-seeking questions (Jiang, 2018).
- The researcher must make the topic relevant to and interesting for the participants so that they are keen to participate and answer the questions, knowing that they may benefit when the results are finalised (MacDaniel & Gates, 2014).
- The researcher must provide the participants with the opportunity to be contacted after completion of the questionnaire to receive an update of the results (Kara & Pickering, 2017).

In this study, the researcher sent an email invitation to the participants containing a link that directed them to the questionnaire which had instructions on what was expected from them. The questionnaire

contained definitions of critical concepts that the participants had to understand to make a meaningful contribution to the study. Hence, it was important for the researcher to select the participants based on their accessibility to the internet and their age. The sampling method used in this study was explored to provide an indication of how the participants were selected.

4.15. Sampling

According to the spreadsheet provided by the Human Resource Department in the Ethekewini Municipality in 2019, the organisation employed approximately 5 500 millennials with an estimated staff complement of 23 000 employees in various departments. This is regarded as a large number of millennials; however, the majority of the millennials are employed as graduates and in semi-skilled positions. The researcher acquired from the Human Capital Department a list of all the millennials employed by the municipality who had access to the internet, computers and smartphones and were available and willing to participate in the study. The questionnaire was sent to the millennials who were identified using the following formula. The sample size was calculated using a sample size calculator which comprised of the population size of 332 millennials, confidence level of 95%, z score of 1.96 and a margin of error of 2:

$$\text{Sample Size} = \frac{\frac{z^2 \times p(1-p)}{e^2}}{1 + \left(\frac{z^2 \times p(1-p)}{e^2 N} \right)}$$

Sampling is defined as the process of attaining information from a subset of a bigger group (Jiang, 2018). A researcher acquires the results from a sample and makes an estimate of the characteristics of the bigger group (Zikmund, Babin, Carr & Griffin, 2013). The purpose of sampling is to make estimates quicker through the use of a smaller sample to ensure an accurate prediction of the results (MacDaniel & Gates, 2014). To make certain that the prediction would be accurate in this study, the researcher ensured that the participants were selected based on their behaviour/characteristics as part of the larger population which formed the basis for the small sample. The leaders were selected based on their positions and decisionmaking power and the millennials were selected based on their age and access to the internet. Sekaran & Bougie (2016) assert that the researcher must use a scientific method to ensure that the sample is representative of the population; with the population meaning the entire group of individuals from which information is needed (Richards, 2014). In this study the target market was identified based on the research objectives of the study to ensure that the data collected from the appropriate target market was credible and trustworthy. A sample used

during this stage of the research is defined as a subset of all the members of a population (Sekaran & Bougie, 2017). The researcher must develop a sampling plan to ensure that the research objectives are aligned to the data collection method that will be used. The researcher followed the steps enumerated by MacDaniel & Gates (2013) to develop a sampling plan:

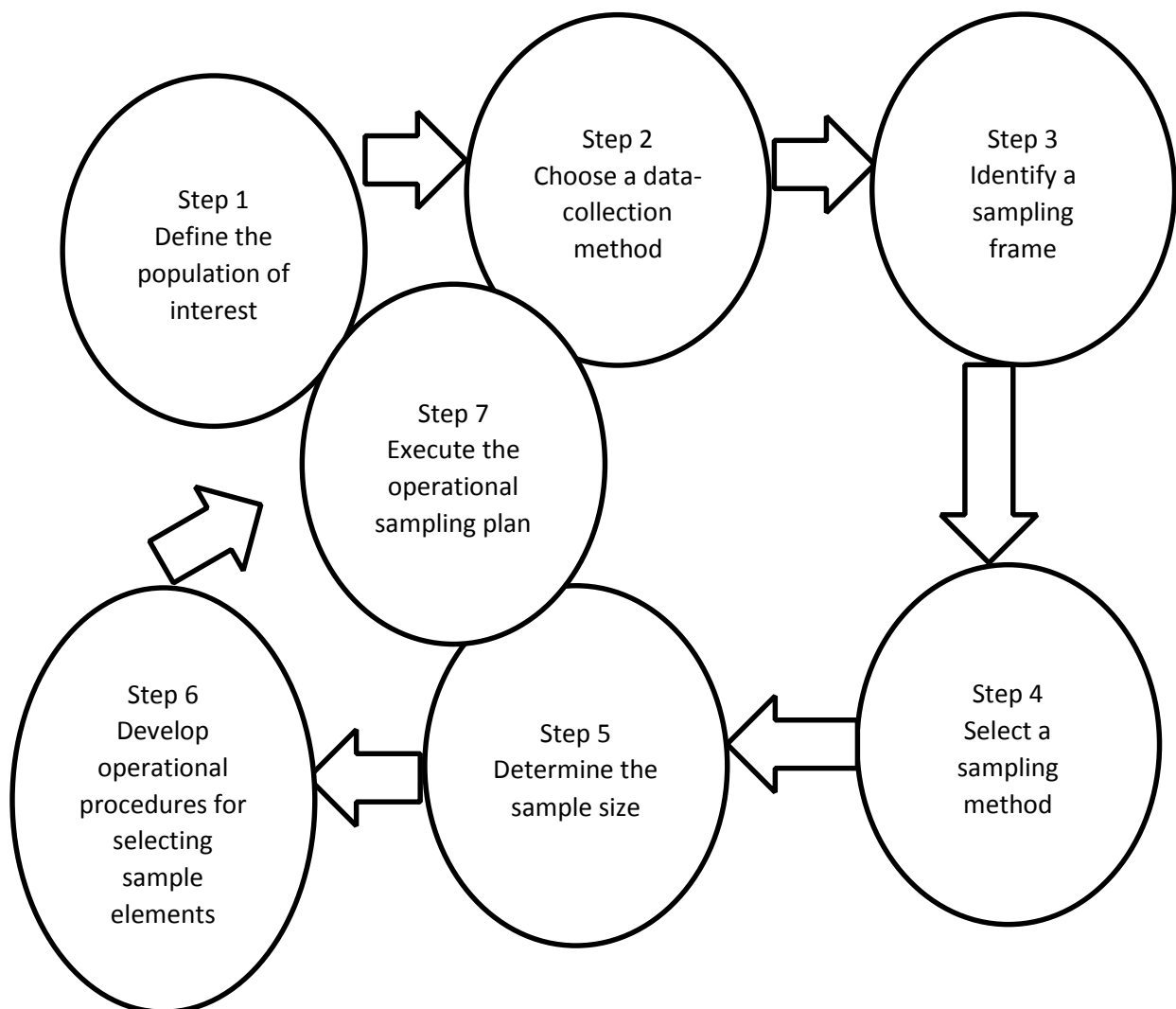


Figure: 4.5: Developing a Sampling Plan

Source: MacDaniel & Gates (2013:381).

The decision to use qualitative or quantitative methods is important for a study since its results are based largely on the sample that has been selected according to the objectives the researcher wishes to achieve (Acharya, Prakash, Saxena & Nigam, 2014). The most common sampling methods can

be classified under two heading, namely probability and non-probability sampling. Probability samples are selected in a manner that depicts that each element of the population has a known, non-zero likelihood of selection. This sampling methods allows the researcher to generalise the answers of the participants chosen for the study to the targeted population. The researcher in this study was meticulous in the procedure used for selection to avoid any arbitrariness or biasness in the selection of the sample. The law of probability was upheld by the researcher by calculating the extent to which the sample value differed from the population value, ie the sampling error (Jiang, 2018). Probability sampling comprises of simple random sampling, systematic random sampling, stratified random sampling, cluster sampling, multiphase sampling and multistage sampling. Non-probability samples are specific elements from the population selected in a nonrandom manner. Non-random sampling is used where the researcher selects the participants based on convenience, for instance, that they are easily contactable (Bottcher, Albrecht, Venz & Felfe, 2018).

Purposeful non-randomness takes place when a sampling plan methodically excludes or over-represents certain subsets of the population (Albert, 2017). Non-probability sampling comprises of convenience/purposive sampling, quota sampling and snowball sampling. Probability and non-probability samples have limitations and advantages; however, the choice to use either probability or non-probability sampling depends on the research objectives. Research has found that probability sampling is preferred since the results gathered from data collection can be generalised (Acharya, Prakash, Saxena & Nigam, 2015). The benefits of probability sampling compared to non-probability sampling include the following (Lee & Son, 2022):

- The researcher is guaranteed to obtain information from a representative cross-section of the population of interest.
- The sampling error can be calculated.
- The results of the questionnaire can be projected to the total population.

Although probability sampling is more popular, MacDaniel & Gates (2013) assert that probability sampling has the disadvantage of being more expensive than non-probability sampling. Once the researcher has selected the sampling method, the sample size is important to make statistical inferences about the population values. In probability sampling, the researcher uses formulas to calculate the sample size required, taking into consideration the levels of acceptable error (the difference between sample result and population value). The researcher calculates the levels of confidence (the likelihood that the confidence interval - sample result plus or minus the acceptable error - will take in the true population value). The researcher ensures that sampling errors are eradicated by making sure that the sample selected is perfectly representative of the population. The

researcher must take into consideration that the accuracy of the sample results is commonly affected by sampling and non-sampling (measurement) errors (Lueng, 2015). Sampling errors are administrative and random. Administrative errors relate to the problems in the execution of the sample – the flaws in the design of the sample which result in it being non-representative of the population (Bazeley & Jackson, 2015). The researcher is able to avoid or minimise errors by paying careful attention to the design and execution of the sample.

4.15.1. Probability Sampling

In probability sampling, there are four types of sampling methods, namely simple random sampling, systematic sampling, stratified sampling and cluster sampling (Clough & Nutbrown, 2015).

4.15.1.1. Simple Random Sampling

Simple random sampling is a probability sample selected by assigning a number to every element of the population and afterwards using a table of random numbers to select specific elements for inclusion in the sample. Simple random sampling in this study was selected as follows:

- Assigning a number to each element of the population.
- Using tables of random numbers.

Some researchers are interested in this method because it is easy and meets all the requirements of probability sampling (Crouch & Housden, 2011). Simple random sampling guarantees that every member of the population has a known and equal chance of being selected to be part of the sample (Crouch & Housden, 2011). This sampling method begins with a current and complete list of the population which is argued by some researchers to be extremely difficult to obtain (Jiang, 2018). In this study single random sampling was applicable because the simple random samples were obtained through computer files of all millennials at the municipality provided by the Human Resource Department – the researcher categorised the list from the computer file detailing a list of all employees and the participants were selected based on their age, since the target group was millennials. The researcher used an electronic questionnaire, and the sample was selected based on age. The researcher used the following to compute the simple random sample:

Probability of selection = Sample size

Population size

4.15.2. Determining the Sample Size for Probability Sampling

In determining the sample size in probability sampling the researcher is required to consider the following information needed to produce the required calculations for a sample result (MacDaniel & Gates, 2014):

- An estimate of the population standard deviation.
- The acceptable level of sample error.
- The desired level of confidence that the sample result will fall within a certain range of the true population values.

In this study the researcher was able to calculate the size of the sample as required for random sampling.

The researcher considered the normal distribution to produce classical statistical inferences.

4.15.3. Non-probability Sampling

A non-probability sample refers to any sample that does not meet the requirements of probability sampling (Sekaran & Bougie, 2013). The main disadvantage of non-probability samples is their inability to calculate sampling errors (Albert, 2017). This results in greater difficulty in evaluating the overall quality of nonprobability sampling. MacDaniel & Gates (2014) argue that researchers who chose to use non-probability sampling must answer the following questions:

- How far does non-probability sampling deviate from the standard required of probability sampling?
- How will the researcher make an assessment of the methodology that will be used to produce the non-probability sample?
- Is it likely that the methodology employed will produce a cross-section of participants from the target population?
- Is the sample biased in a particular direction?

The main types of non-probability sampling are convenience, judgment, quota and snowball sampling.

4.15.3.1. Judgment Sampling

Judgment sampling is a non-probability sampling technique used by experienced individuals to select the sample based on their judgment of an appropriate characteristic required of the sample members (Lueng, 2015). The researcher chooses a sample that will satisfy the specific purpose of the research, although the sample is not fully representative (Flick, 2015). The selection criteria in

this sampling method are applied to any sample which is influenced by the researcher's judgment of what constitutes a representative sample (Astroth, 2018). This sampling method was selected for this study since the participants were chosen for interviews based on their position in the organisation (senior management), they are currently leading millennials and their decision-making power.

4.16. Reasons for Using Purposive/Judgment Sampling

Judgment sampling, also referred to as purposive sampling, is generally the sampling method of choice in qualitative research because the respondents are selected based on the researcher's judgment that they are the right target to achieve the research objective (Guarte & Barrios, 2013). The advantage of using this sampling method is that the participants can be selected based on characteristics such as age, place of residence, gender, class, profession, marital status (MacDaniel & Gates, 2013). In this study the researcher selected the participants based on their hierarchical level in the Ethekewini Municipality since the participants were in senior management positions and had the authority to make decisions pertaining to millennials and the fourth industrial revolution. Hence, the researcher's experience on the topic assisted in making the decision purposefully to select the individuals who would take part in the research. The researcher recognised that the participants selected all managed millennials in their departments and had a good understanding of the municipality's plan and the challenges it faced in integrating the fourth industrial revolution. In this study, the fifteen (15) leaders selected were from different departments; this allowed the researcher to obtain a broad understanding of how they experienced millennials and the fourth industrial revolution within the municipality.

The leaders selected had a distinct role to play within the municipality to ensure that millennials and the fourth industrial revolution are integrated. The interviews were conducted in the municipal departments where the participants worked. The interviews were each 40 minutes to an hour long, and were conducted prior to distribution of the questionnaire. Table 4.3 shows the information pertaining to the respondents who were interviewed. Purposive sampling was also used to select the millennials who participated in the focus group based on age, access to the internet and computers. A total of six (6) millennials were identified to participate in the study to provide insights on their experience working for the Ethekewini Municipality pertaining to themselves as a generation and their assessment of the readiness and/or unpreparedness of the municipality to integrate the fourth industrial revolution into the workplace. The researcher chose the six millennials to participate in the study to supplement the information collected from the questionnaire. The focus group was an additional data collection method to supplement the responses received from the questionnaire since the data collection using the electronic questionnaire was interrupted by the national lockdown due

to the Covid-19 pandemic and the participants did not have access to computers and the internet. Table 4.3 displays the leaders who participated in the interviews.

Table 4.3: List of Interview Participants

| Respondent | Occupational Category | Department |
|-------------------|------------------------------|---------------------------------|
| R1 | Senior Manager | Research |
| R2 | Deputy Head | Human Resources |
| R3 | Senior Manager | Change Management |
| R4 | Senior Manager | IT |
| R5 | Senior Manager | Cleansing and Solid Waste |
| R6 | Senior Manager | Municipal Institute of Learning |
| R7 | Chief Learning Officer | Ethekwimi Municipal Academy |
| R8 | Senior Manager | Human Resources |
| R9 | Head of Department | Investments |
| R10 | Chief Legal Advisor | Legal Services |
| R11 | Chief Legal Advisor | Legal Services |
| R12 | Head of Department | Treasury |
| R13 | Senior Legal Advisor | Legal Services |
| R14 | Head of Department | Economic Development |
| R15 | Manager | Employment Equity |

4.17. Data Analysis in Qualitative Research

The responses received from the interviews were coded and analysed according to each theme developed from the questions posed to the respondents. The responses of all the participants were recorded using a voice recorder and were transcribed. The responses were grouped and were assigned to numeric codes from the various answers received for a particular question. This method

is supported by Cresswell (2014) who asserts that coding refers to the method of grouping and assigning numeric codes to the numerous responses to a specific question. The transcriptions were used to identify similar responses from the participants in order to create themes. The themes developed included responses that were not in favour of the researcher's findings which eliminated any form of bias. The researcher ensured that the names of the participants were not included in the analysis of the study to protect their identities. The researcher used markers/highlighters to develop themes emanating from the data. To identify the respondents, the individuals who participated in the interviews were coded as R1 to R15, as illustrated in the table (Table 4.3). The participants were encouraged to provide responses based on their individual perceptions, relying on their experience and from an organisational point of view, to ensure that the researcher captured data that was free from personal bias. The process of thematic analysis was crucial to gathering data that was practical and would be beneficial to the recommendations of the study. The researcher identified patterns of themes by reading the transcripts of the responses received from the interviews.

4.18. Data Analysis in Quantitative Research

In quantitative research, descriptive statistics are used to statistically summarise large responses received from the participants (Flanagan, Greenfield, Coad & Neilson, 2015). The researcher uses sample descriptive statistics to make inferences about the characteristics of the total population of interest (Parkin & Green, 2016). Descriptive analysis is defined as the elementary conversion of raw data in a manner that explains characteristics such as central tendency, distribution and variability (Lueng, 2015). The researcher received the responses and tabulated the preferred leadership style. The mean, median and mode for the leadership style preferred to promote the integration of millennials and the fourth industrial revolution and the readiness of the Ethekewini Municipality to integrate millennials and fourth industrial revolution were used as descriptive statistics which described the central tendency in three different ways, which is the mean, median and mode. Jiang (2018) describes the mean, median, mode, variance range and standard deviation to characterise extensively the descriptive statistics applied to summarise the data in a meaningful way to enhance the study. In this study the researcher used the level of scale measurement to select the most suitable form of statistical analysis. Bryman & Bell (2011) assert that the level of scale measurement affects the choice of descriptive statistics. The researcher must take into consideration that statistics suitable for lower-order scales, referred to as nominal and ordinal, are appropriate for higher order scales, referred to as interval and ratio; however, this does not apply in reverse (Zikmund, Babin, Carr & Griffin, 2014).

The levels of scale measurement and suggested descriptive statistics were articulated in the analysis (Zikmund, Babin, Carr & Griffin, 2014). Questions in this study were posed to the millennials to

ascertain how often they used the internet as opposed to newspapers for work purposes to produce a result that was a nominal variable, referred to as a frequency distribution (Astroth, 2018). The responses revealed that 90% of the millennials used the internet for work purposes, thus the mode was the internet. The researcher used a histogram to show frequency distribution. A histogram is a graphical way of presenting frequency distribution in which the height of a bar matches the observed frequency of the category (Bansal, Smith & Vaara, 2018). A nominal distribution line was superimposed over the histogram which provided an easy comparison to gauge whether or not the data was skewed or multimodal (Arseven, 2018).

4.19. Tabulation

Tabulation is described as the orderly arrangement of data in a table or any other summary format (Sackey, Bester & Adams, 2017). The researcher created a frequency table to count the various ways the respondents answered the questions and arranged them in a simple tabular form. MacDaniel & Gates (2013) describe a frequency table as a table which shows the different ways respondents answer the questions. The actual number of responses to each question is referred to as a variable's frequency distribution. In this study simple tabulation was done to show the researcher how frequently each response occurred.

4.19.1. Cross-tabulation

Cross-tabulation refers to the examination of the answers/responses to one question relative to the responses to one or more other questions (Astroth, 2018). Cross-tabulations are described by researchers as simple but powerful tools for data analysis (Creswell, 2014). Cross-tabulation was applicable to this study since the researcher identified some of the responses to one question relating to the response to one or more other questions to ensure that the relationship between the variables was captured. Crosstabulation comprises of frequencies and percentages; the percentages are constructed on column totals (Creswell, 2014). The researcher captured the different percentages for each cell in a cross-tabulation table which included column, row and total percentages. The researcher ensured that the differences and changes in the statistical and mathematical senses were addressed to avoid problems with the validity and reliability of the data.

4.19.2. Statistical Significance

The purpose of making a statistical inference is that it allows the researcher to generalise from the sample results to the population characteristics (Kuruczeleki, Pelle, Laczi & Fekete, 2016). An important principle of statistical inference is that it recognises the possibility of numbers being different in a mathematical sense but not significantly different in a statistical sense (Zikmund, Babin, Carr & Griffin, 2013). For instance, where the results of one question reveal that 51% of the

respondents prefer one product compared to 41% who prefer another, there will be a mathematical difference in the results which would appear to be minor and not significant. To ensure that accuracy is maintained, the researcher must ensure that the range of accuracy has been captured to measure the preferences which do not affect the statistics. MacDaniel & Gates (2014) assert that three different concepts can be applied to the notion of variances regarding results taken from samples:

- **Mathematical difference:** If the numbers are not exactly the same, they are different. The difference does not mean that the difference is important or statistically significant.
- **Statistical difference:** If the difference in the numbers is so large as to be unlikely to have occurred based on chance or sampling error, the difference is statistically significant.
- **Managerially important difference:** A difference can exist based on managerial perspective if the results or numbers are sufficiently different.

4.19.3. Tests Used in the Analysis of the Quantitative Research

The researcher used various tests to analyse the data received from the questionnaire that was sent to the millennials. The tests used in the analysis are outlined briefly below:

- Descriptive statistics including means and standard deviations, where applicable. The frequencies are represented in tables and/or graphs.
- Chi-square goodness-of-fit-test: A univariate test, used on a categorical variable to test whether any of the response options are selected significantly more/less often than the others. Under the null hypothesis, it is assumed that all responses are equally selected.
- Wilcoxon Signed Ranks test: A non-parametric test used to test, in this study, whether the average value is significantly different from a value of 3 (the central score). This is applied to Likert scale questions. It is also used in the comparison of the distributions of two variables.
- ANOVA: A test for several independent samples that compares two or more groups of cases in one variable.
- Binomial test: Tests whether a significant proportion of respondents select one of a possible two responses. This can be extended when data with more than two response options is split into two distinct groups.
- Spearman's correlation: Spearman's correlation measures how ordinal variables or rank orders are related.
- One sample t-test: Tests whether a mean score is significantly different from a scalar value.
- Independent samples t-test: A test that compares two independent groups of cases.

- Paired samples t-test: A test that compares the means of two variables for a single group.
- Factor analysis: Explores the structure of data and extract factors.

4.20. Reliability and Validity

Reliability and validity are important aspects in all research activities to ensure that the research conducted is trustworthy. A researcher must ensure that their research is truthful, applicable, reliable and unbiased in order for it to be considered to be a valuable study (Amankwaa, 2016).

4.20.1. Reliability in Quantitative Research

Reliability refers to the consistency of a measure of a concept. Three prominent factors must be considered to conclude whether a measure is reliable (Bryman & Bell, 2011):

- Stability entails enquiring whether or not a measure is stable over time, to ensure that the researcher is confident that the results relating to that measure do not fluctuate. If administered to a group and then re-administered, there is likely to be very little variation over time relating to the results obtained (Jiang 2018).
- Internal reliability relates to whether or not the indicators that form the scale or index are consistent, ie whether or not the scores received from the respondents on any of the indicators tend to be related to their scores on the other indicators (Astroth, 2018).
- Inter-observer consistency occurs when a great deal of subjective judgment is included in activities such as the recording of observations or the translation of data into categories and where more than one observer is involved in such activities. In this instance, there may be a possibility of lack of consistency in their decisions (Abowitz & Toole, 2016).

4.20.2. Validity in Quantitative Research

Validity refers to whether an indicator devised to gauge a concept really measures that concept. Validity is established in various ways, namely face validity, concurrent validity, predictive validity, construct validity and convergent validity (Saun, Tan, Soelar & Ali, 2017).

Face validity: This refers to a researcher who, when developing a new measure, must establish that face validity exists in which that measure seemingly reflects the content of the concept in question (Doody & Noonan, 2013). Face validity can be established by requesting other people to confirm whether the measure seems to be getting at the concept that is the focus of attention to ensure the transparency of a test that has been applied (Flick, 2015).

Concurrent validity: This relates to the researcher seeking to gauge the concurrent validity of the measure (Jiang, 2018). The researcher uses a criterion that is known to differ which is relevant to the concept in question.

Predictive validity: This occurs when a new measure is tested (Lueng, 2018). The researcher uses a future criterion to measure opposed to a contemporary one which is similar to concurrent validity.

Construct validity: The researcher should estimate the construct validity of a measure (Flick 2015). The researcher must deduce the hypotheses from a theory relevant to the concept which is verified by comparing the test applied to the other tests.

Convergent validity: The validity of a measure must be gauged by associating it to measures of a similar theory developed through other techniques (Jiang, 2018).

Relying on the above, the researcher successfully ensured that this study produced results that were valid and reliable by using a mixed methods approach that took into consideration views and opinions from both leaders and millennials. The researcher ensured that the data collected was a true reflection of what the respondents shared during the data collection phase and linked these responses with existing theory.

4.20.3. Reliability and Validity in Qualitative Research

The primary reason for selecting the qualitative method is to capture the authenticity of the data collect from the participants (Arseven, 2018). Hence, the researcher must have a great sense of ensuring that there is credibility in the interpretation of data gathered from the participants.

4.20.4. Validity in Qualitative Research

Validity signifies the extent to which the findings of research accurately and adequately reflect the authentic meaning of the concept under deliberation (Lewis & Saunders, 2018). Struwig & Stead (2011) define validity as the trustworthiness of the data gathered and analysed as findings. Validity in qualitative research refers to the researcher's ability to produce findings/results that are presented accurately from the data collected from the respondents in a study (Doody & Noonan, 2013). A study is considered to be valid when the research measures the topic as intended and measures the truthfulness of the findings of the research (Jueng, 2015). The study or research is considered to be valid if the findings/results of the study are rational, honest, comprehensive and reasonable (Astroth, 2018). Quinlan & Babin (2015) state that validity relates to the manner in which the researcher is able truthfully to display how meaningful and valuable the study is in relation to how the concept was represented. Hancock, Amankwaa, Revell & Mueller (2016) define validity in qualitative research as the extent to which data collected from the respondents is provided as information that

is credible and trustworthy, since the researcher is part of the interview process and is able to defend the validity of the responses. Researchers have shared various opinions on how validity can be determined in qualitative studies, especially regarding the interpretation of data which is gathered directly from participants at the forefront of the problem (Flick, 2015). The participants share their views based on their own experience on a particular topic/subject, therefore, validity is ensured because the researcher is able to determine during the interview whether or not the participant has a strong background on the topic (Flick, 2015). In this study, the researcher did not have any personal interest in the study which could have had an impact on the researcher's ability to remain objective during the interview process. The researcher was not employed by the Ethekwini Municipality and had no prior knowledge of the challenges facing the municipality in relation to millennials and the fourth industrial revolution. In qualitative research quality is ensured when the research objectives are answered throughout the study to establish validity (Lueng, 2015). The criteria adopted in the research are critical to distinguish how the researcher will meet the research objectives, thus determining validity and reliability (Lampi & Stahl, 2019). To ensure that the research was valid, the researcher in this study recorded the data accurately by using a voice recorder and made sure that all transcriptions of the recordings were checked thoroughly.

Flick (2015) found that validity in qualitative research can be attained based on the ability of the researcher to reconstruct the criteria used in a quantitative study to produce norms suitable for qualitative research. In this study the researcher used a mixed methods approach to achieve a balance between quantitative and qualitative methods of gathering data to make sure that the results of the study were reliable and valid. The responses were quoted directly from the data gathered from the interviews, the researcher ensuring that the transcriptions were a true reflection of the direct quotes.

4.20.5. Reliability in Qualitative Research

Reliability of a study is concerned with the consistency and dependability of the results/findings of a study (Arseven, 2018). Reliability is determined by the extent to which research can be repeated whilst maintaining its consistency and produce a similar outcome (Flick, 2017). The main purpose of reliability in qualitative research is to establish the rigour and dependability of the research (Crouch & Housden, 2003). Although some researchers have raised concerns on the credibility of qualitative research due to its naturalistic approach, the trustworthiness of the data is determined by the consideration of certain criteria, such as credibility, dependability, confirmability and transferability (Stark, McGhee & Jimerson, 2016). The data collected from the interviews and the focus group in this study was recorded and transcribed by a professional transcriber before the data was analysed and coded based on the responses received from the interviews and the focus group.

Credibility refers to the degree to which the research findings represent the exact meanings of the participants (Pluye & Hong, 2014). The research findings in this study were a true reflection of the data collected from the participants and were interpreted accurately by the researcher through the use of a voice recorder and transcriptions of those recordings by a professional transcriber.

Dependability refers to the consistency of the information gathered over a period of time and in similar circumstances (Pluye & Hong, 2014). The researcher must reflect evidence showing that, if the same research were to be repeated using the same data collection method, context and the same participants, the results would be the similar.

Confirmability refers to the degree to which the findings of research are the outcomes that encompass the experiences, insights and ideas of the individuals who participated in the research (Hong, Pluye,

Bujold & Wasset, 2017). The researcher's own preferences and characteristics must be absent from the research; hence, the study must reflect the impartiality and consistency of the research findings.

Transferability refers to the degree to which the findings of a study are applicable to other contexts and respondents (Hong & Pluye, 2014). The study is transferable where the researcher is able thoroughly to narrate critical aspects of the topic and others are able to evaluate whether the findings and the conclusion are transferable in a similar context or with other individuals.

In this study the researcher successfully ensured that the data gathered through the use of interviews was accurate and was supported by the responses gathered which was linked to literature to enhance the findings.

4.21. Elimination of Bias

Research has to be conducted in an honest and transparent manner; it must not deviate from its authenticity (Arseven, 2018). Research that deviates from the principles of ethics is automatically unreliable and deceptive. Once a researcher deviates from the truth/facts gathered through the data collection phase, the results of the study will be inconclusive (Pluye & Hong, 2014). Bias on the part of the researcher will be apparent from the choice of the sampling method selected, and the observations and assumptions of the researcher (Lueng, 2015). If the sample is not representative of the population, this may lead to potential bias (Flick, 2015). In this study, the researcher was scrupulous in only relying on data gathered from the participants. The participants who participated in the interviews and the questionnaire were selected based on their experience within the municipality which made a significant contribution to the study. The responses received from the questionnaire, interviews and the focus group were recorded accurately, and all responses were

analysed in their original form to ensure authenticity. The researcher maintained neutrality during the data collection and analysis process and discarded her own opinion and knowledge on the topic to ensure that the study was valid and reliable.

4.22. Limitations

In most instances, limitations are derived from the research methodology and design of a study which may have an impact on the reliability and validity of the study (Astroth, 2018). The study did have a few limitations which were beyond the researcher's control; however, they did not have an impact on the outcome of the study. One of the limitations was limited literature on the fourth industrial revolution and millennials. The concept of the fourth industrial revolution has been viewed from a business efficiency perspective, but not as a means of attracting and retaining millennials. Literature on millennials was limited in the context of linking them to leadership and the fourth industrial revolution. In relation to the questionnaires the researcher was not able to send the questionnaire to all millennials in the municipality because of their lack of internet connectivity and access to electronic mail, and some millennials who were targeted did not respond to the questionnaire because the national lockdown following the Covid-19 pandemic meant that they did not have access to the internet, emails and computers. As a result 96 responses were received out of the 332 that were expected. The number of responses was sufficient to make a contribution to the study, and to mitigate the lack of responses, a focus group was added which comprised of millennials. The researcher was still able to provide conclusive findings based on the number of participants. The responses provided gave a clear indication that the outcome of each question was an accurate account. Although the leaders were purposefully selected based on their occupational knowledge, it was evident that some of the leaders did not have a common understanding of the terms millennials and the fourth industrial revolution. The researcher used different ways of probing the leaders to provide more information based on their individual experience and understanding.

The researcher allowed the participants to use examples to express their understanding of the two terms to ensure that the quality of the findings was not compromised. During the interviews, some participants were not aware of the initiatives the municipality had planned or put in place in relation to millennials and the fourth industrial revolution. The researcher was able to conceptualise some of the points given in other interviews to gauge whether the leaders were triggered by any of the questions asked, without giving the impression that the other leaders were aware of the long-term initiatives that the municipality was engaging in in relation to the fourth industrial revolution. The position that the leader occupied in the organisation was also a contributing factor, given that some of the positions involved strategy formulation and others did not. The researcher was able to successfully mitigate all the possible limitations of the study by providing alternative solutions.

4.23. Conclusion

Research methodology is a crucial factor in any study as it provides guidance towards the attainment of the research objectives. As explored above, the research methodology provides guidance on data gathering, scrutiny and amplification. Most importantly the advancement of themes is guided by the kind of research methodology chosen by the researcher. Consequently, in this study the researcher opted for a mixed methods research approach based on the nature of the study which related to human experience and technological advancement, to successfully respond to the question and objectives of the study. It was important for the researcher to use mixed methods to ensure that the study was valid and reliable since the data was collected from both leaders and millennials. The researcher was able to get a better understanding of the challenges that leaders faced with leading millennials and leading the changes presented by the fourth industrial revolution. The millennials were also able to share their views on how they were being led in the municipality and how the fourth industrial revolution had impacted the working environment. This approach gave the study a good balance since both parties were able to share their experience within the municipality relating to the topic. The researcher wanted to get a balanced view from the leaders and millennials to better understand the opportunities and challenges the participants experienced in relation to the topic and whether there were any similarities in the responses provided. This enabled the researcher to compare the relationship of the variables measured and, importantly, to ensure that the study was credible. The next chapter provides a detailed narrative of the data obtained from the interviews with the leaders and the focus group with millennials to ensure a thorough balance of reporting on the findings since the study used three data collection methods.

CHAPTER FIVE: NARRATIVE OF THE INTERVIEWS: MUNICIPAL LEADERS

5.1. Introduction

This chapter provides a narrative of the data obtained from the interviews with municipal leaders. Since the questionnaires are analysed statistically, they are explored as part of the results and findings of the study in Chapter Six. In addition, the focus group data, which was added to overcome the limitations of the study due to Covid-19 and to ensure the authenticity of the study, are examined in conjunction with the questionnaires in the next chapter as they gauge the perspective of the millennials on the subject. This chapter provides a summary of the views from the interviews with the leaders of the municipality. It provides an analytical foundation of the study since the ultimate goal is to develop a leadership model to integrate millennials and the fourth industrial revolution into the Ethekewini Municipality. Additionally, data narrative is crucial to answering the aims and objective of the study as provided for in chapter one. Thus, this chapter is the foundation for the next chapter which presents the findings of the study. In this context, the adoption of a narrative approach encompasses several ways of telling stories by interpreting the responses gathered from persons and their life experiences (Shannon-Baker, 2015). The aim of developing a narrative analysis is to use a group of analytical methods to analyse the various characteristics of the storyline gathered from the interviews (Bryman & Bell, 2011). The researcher was able to collect original and accurate data from the interviews and recorded real time from the data provided by them relating to of their own life experiences in the workplace.

Jiang (2018) found that narratives in studies are utilised to expand on human experience. This is supported by Flick (2015), who found that narrative of data is a useful tool to answer research questions, and to determine the aims and objectives of the study through the interpretation of the data collected. The focus of data narrative, according to Arseven (2018), is on citations from the interview transcripts and quotations from the questionnaire which provide a short description relating to the topic of the study. Saunders & Lewis (2018) state that thematic narrative and structural narrative have been identified as two approaches utilised in qualitative research. In qualitative research, thematic narrative analysis refers to the themes selected by the researcher which are spoken in words, written text etc which provide the opportunity for new insights (Johnson, 2020). It is defined as a method of categorising, exploring and describing themes that emanate from the data (Astroth, 2018). On the other hand, structural narrative analysis refers to how the narrative will be measured. This method investigates the initial plan, the sequence of events, the character of the storyteller and the participants and the intention of the storytelling (Lueng, 2015). The manner in which language is used is explored through structural narrative analysis to establish how the use of

language had an effect on the researcher and the participants (Arseven, 2018). Hence, the primary focus in structural narrative analysis is to determine the construction of the narrative and the use of language (Hadi, Alldred, Closs & Briggs, 2014). Thematic narrative analysis was found to be useful in this study compared to structural narrative analysis because of its focus on the data collected and interpreted from the transcripts. In this regard, this chapter includes direct quotes from the interviews to deliver an accurate reflection of the data collected from specific questions. The interviews were recorded and transcribed. Thematic analysis was used because of its flexibility and its application in various epistemological situations (Lee & Son, 2022). The intention of interviewing fifteen (15) leaders was to determine the leadership style that may be adopted by the Ethekwini Municipality to integrate millennials and the fourth industrial revolution. Thematic analysis allowed the researcher to uncover the perception of the participants on the experiences they face in the workplace relating to millennials and the fourth industrial revolution and how these can be integrated into the Ethekwini Municipality.

5.2. Interview Data: Municipal Leaders on Millennials

The leaders were interviewed based on their role in and influence on the need to integrate millennials and the fourth industrial revolution within the municipality. Some leaders who were interviewed occupy strategic positions that have an influence on decision making, others were selected based on their role in executing strategies operationally. The researcher was able to identify and interview some leaders who are millennials who occupy strategic positions to gain their perspective on the topic. Thus, the data collected includes the views from strategic and operational leaders, leaders who are millennials and a mix of both younger and older generation leaders. Such an approach is pertinent since the study is about integrating millennials and the fourth industrial revolution into a world of work dominated by the older generation. The leaders who participated in the interviews appeared to be genuine, impartial and willing to share their own experiences pertaining to the topic. The leaders gave examples of the experiences they had come across in the organisation and spoke freely on their own personal observation of the workplace in relation to millennials, the fourth industrial revolution and leadership. The data was analysed, and the different themes emerging from the views of the leaders are fully explored in Chapter Six. Leaders were engaged on various questions including their understanding of millennials and the fourth industrial revolution. They were further engaged on the leadership style utilised within the municipality. It was crucial to gauge their understanding on these topics as at the heart of this thesis is the need to develop a leadership model to integrate millennials and the fourth industrial revolution.

Furthermore, among the objectives of the study is the need to determine the leadership style required to lead millennials and the fourth industrial revolution. Moreover, the leaders are entrusted to

develop transformative strategies to ensure that the municipality participates globally and remains competitive. Ultimately, the leaders are expected to have a broad understanding of the aforesaid concepts. In this regard, the leaders shared various views on the leadership style utilised by the municipality. For example, the participants stated:

‘Yes, I think we still are very much stuck in doing business as business was done all those years ago. Uhm, most of our senior leadership our (executive leadership) are not millennials. they are your if i could call it “old school” type of leadership, where it is very much rigid and uhm, there is not much room for adapting.’ (R10.)

‘[T]he leadership style in the municipality for the last few years especially, has changed. With all the governance and control. Very stifling, just tick the boxes and if you’ve got initiative it’s quite stifled, because you have to follow the process and everything takes so long, and, it’s not a good place for, for someone with, who wants to be innovative, and you know, who wants to show initiative. It’s a good place if you just want to do the bare minimum.’ (R4.)

When the participants were probed further on the leadership style currently utilised by the municipality, the responses were that the leadership style is -- *‘very transactional, totally transactional actually’ (R5); ‘the leadership style was more around; it was like a semi military kind of operation’ (R12); ‘look I think we have to concede that the culture inside the municipality is uhm, not good. Uhm I would go so far as to say it is almost corrosive’ (R9).*

Some participants also expressed that it was difficult to identify a leadership style utilised by the municipality due to political interference within the municipality which made it difficult to lead effectively:

‘[I]n my observation we have kind of lost our integrity and since then, then, we have been fighting towards restoring that, uhm, being incognisant of the fact that we are a politically charged environment and, uhm, at some point, uhm, as a leader, uhm, you compromise your principles, in trying to fulfil your duty of providing a service, uhm, that is largely, uhm, caused by, uhm, uhm political interference into our HR processes. So, all of us, we have fighting towards restoring that our integrity as leaders, we have had so many challenges in doing that, drilling it down too.’ (R5.)

This was corroborated by another who explained that:

‘[T]he municipality is also largely unionised and it also largely politically influenced so at various levels, you know there is this. it is volatile, dynamic, it is fluid, nothing is really set within the municipality as such.’ (R3.)

In the light of the above responses, it can be said that the leaders have different interpretations of the leadership style utilised by the municipality. Put differently, it appears that the municipality does not have a leadership style that is embedded in the organisation. Some participants explained that leaders used different leadership styles depending on the functions of a particular department and the situation they are presented with at a particular time:

‘[I]t varies, depending on who you are consulting with, you will find, uhm ethical leadership, and you will find some political leadership, you will find transformational leadership, so it is a variety of leadership styles that you get.’ (R8.)

‘Uhm, it varies and, uhm, and, primarily because leadership styles will be determined by the environment and certain situations. It’s going to be very difficult to apply one leadership style across all the functions in the city. It depends in where the person is leading and it also depends on the personality of that particular person.’ (R7.)

The participants were probed further to get their opinion on whether the municipality utilises an individual leadership approach based on the department they are responsible for:

‘Uhm, to be honest, the municipality doesn’t have one approach or style of leadership that has elevated to become “THE” leadership style of the city. But, also while from our point of view we develop leaders to be able to apply their leadership abilities, we do not necessarily emphasise on one style of leadership because, I think theory has proven that it is very difficult to apply just one style. You need to combine either two or three even four types of leadership style, uhm, depending on the situation as I alluded to.’ (R7.)

‘I would be making assumptions, because I think it is a massive institution, with about 27 000 people and a number of senior managers and directors and DCMs. All of them have their sort of individual leadership styles.’ (R1.)

‘So, I think the leadership is changed, I don’t think we have a set leadership style. A lot depends on the leadership at the highest level when they come in. So, we have seen a series of, I have seen a series of city managers with different skills and abilities and leadership style.’ (R14.)

One of the participants explained that the municipality has a mix of leadership styles which is dependent on the relationship between the leader and their subordinates:

‘I think it’s a mix, I’ve seen very very awkward relationships between supervisors and leaders or between heads of departments and their subordinates. Some of them take a very, how can I say, dominant role and being hard and fast about certain deliverables. I’ve also seen relationships that

are very laissez faire without any structure management and structured role between the supervisor and the subordinate. So it's a mix I would say you know there is different management styles existing across the institution.' (R6.)

'Uhm, yes being uhm, living in a democratic society, I would think that we have got more democratic leaders, leaders who want to please everyone but obviously decisions not being made at the shop floor. Uhm, for us Yes, that is a good thing but in some instances you need leadership that is a bit stricter and uhm, so your other style of leadership obviously you will need uhm, combination within certain leaders they are able to ensure that the programmes that we want to implement we implement them with ease. If you find resistance some people need to obviously stand their ground and ensure that they influence their authority on certain issue not all but some of the decisions because you will find that there is no movement because you always wanting to allow people to be people and raise their views and try to meet everyone halfway you can't do it for every situation. So, in certain situations you need to ensure that you be autocratic but not as Hitler but in some instances where you need to make sure that you stamp your authority.' (R15.)

The responses from the participants indicate that the municipality does not have universal and common leadership approach, which creates inconsistency and an individualised approach to the manner in which employees are led in the organisation. It can be said that the municipality is faced with the risk of having leaders who have their own leadership styles applicable to their departments which may create a misalignment with the rest of the organisation. One of the participants expressed the view that the municipality would certainly need to have a common leadership style on pertinent strategic matters while utilising a suitable operational approach in order to achieve strategic departmental objectives:

'I wouldn't expect the municipality to have a set leadership style in terms of leading employees but I would certainly expect the municipality to have a set leadership style on key critical strategic issues that will take the municipality forward. For instance, on issues of fourth IR and millennials there is a need to have leadership approach on how to integrate it in the workplace. Coming back to the question, judging from how things are done in the municipality, it appears that it's more authoritative and transactional leadership.' (R13.)

Consequently, the emerging theme from the above is the lack of a universal leadership approach on strategic municipal programmes. Having explored the leaders' perspectives on the municipality's leadership style, leaders were engaged on their understanding of the term millennials to gauge whether they acknowledged that millennials are a different generation to them. Various responses were provided by leaders in this regard:

‘Although I may not know exact definition, I believe it’s those people that were born in the 80s, 90s and 2000s. They are sometimes referred to as generation Y. These are a younger generation or the group of people that are technological savvy and innovative. They do things differently than the older generation.’ (R13.)

‘Ah, so it is generation X and then there’s the millennials. But these are kids that were born into sort of Y2K, technology based, their communication, their ... up social skills, that they are mostly on their phones.’ The participant further said that ‘they have their sort of ... up sense of the world, that it evolves around technology, but also on the positive side, they are quite brave people’ (R1).

‘I just know that, uhm, you have people depending on the time they were born. They are regarded as in a particular category so, people born in 1963, I would be a baby boomer, so millennials will be people born, I would assume in the, from the year 2000. So, that is when the millennium we had change of... that is my understanding, people born in within that time.’ (R14.) R15 shared the same sentiments and said: ‘I think, on a lighter note when I heard of the term “millennium” obviously leading to millennials, uhm, in the years 2000, it was a scary thought because we thought the world was going to end but obviously as we move we are comfortable with the movement and growth of our society in terms of technologies that we see being implemented and when we studied in those years we didn’t have as much technology so organisations are forced to change with the times.’

‘Uhm, millennials to me, are all of those tech savvy people the younger generation who are exposed to technology.’ (R11.) R6 did not associate millennials with technology but described a millennial as follows: ‘So the millennials are for me those that had been born in the 80s if I understand and want to make a change but don’t want to stay in an organisation for far too long and are easily frustrated, full of energy and want to see change happen, and also at the same time don’t want to be bossed around, they don’t want to be pushed around, they want to be recognised for their efforts and they want their contributions to be appreciated.’

‘Millennials for me, means, uhm, younger generation that is techno savvy, okay. They have different priorities in life to the older generations, it is a “now generation”, it is “now generation” that cannot wait, they do not look at building up their pension fund, and learning the steps beat by beat, they can Google everything, okay, not that I trust everything on Google, but they can Google everything.’ (R2.)

An inference can be drawn from the above responses that leaders do not have a uniform understanding of the term millennials since most of the responses revealed different interpretations of who millennials are. It appears that the leaders have not taken the time to understand the millennial

generation which now dominates the working environment; hence, it was important to understand whether or not the leaders acknowledge the presence of millennials in the municipality. The participants acknowledged that the presence of millennials has grown over the years in the Ethekwini Municipality, however, the responses varied on the impact they have had in the organisation:

'We certainly have a lot of millennials who are educated and innovative. But I am not certain whether their presence have any positive effect on the municipality. I don't know whether they are given a platform to contribute to the strategic objectives of the municipality. Being a millennial myself and having worked for the municipality for some time, I believe that millennials have a lot to offer given an opportunity.' (R13.)

'I think, not enough, because they have not been allowed to.' (R2.)

The participant further said:

'I think they have not been allowed to because there are too many old people at the top, you do not really trust, maybe not trust, maybe they do not understand, they do not have confidence in this high tech stuff.' (R2.)

Another participant corroborated this view and expressed that the presence of millennials has not impacted the municipality by stating:

'Ah, I don't think it changed much because there's other things that drives the municipality than staff. Ah, the unions are very strong and they represent a certain part of the work force. You know they drive?' (R4.)

The presence of millennials may not be felt in organisations in South Africa as a result of the workplace culture. A participant shared the view that workplaces in South Africa may not be as vibrant as other countries. The participant asserted as follows:

'You know the problem is that your question, maybe it does not suit the South African context because if you travel abroad there is a lot of, especially the European countries let us use the Asian population. So, youngsters in the workplace and all that is not as vibrant is here.' (R12.)

A different response was provided by one of the participants who explained that the presence of millennials has its pros and cons within the municipality:

'There are pros and cons, like, for all of us there are some of the things that I like, is uhm, I like their enthusiasm, I like their energy, I like their passion, uhm, I like, uhm, new ideas and so on balance they are good. You know, we have got people on in learnerships/internships and it has been a mixed bag of results.' (R9.)

'Not at all because we have a very bureaucratic red tape institution. If you propose something to your leadership and they are not used to doing it that way, uhm, it is seen as an obstacle.' (R10.)

The responses on the presence of millennials in the municipality revealed that the municipality's culture does not allow millennials to flourish. The organisation is more concerned with its daily operational activities than focusing on the human capital aspect. The responses seem to suggest that the municipality does not have a culture that embraces millennials. It was crucial to get an understanding from the leaders whether they felt that there is a difference between millennials and the older generation which may contribute to the lack of interest of the older generation and their not understanding millennials:

'The main difference is that they are technologically savvy. They have different work ethic and their attitude and preferences is certainly different from the older generation.' (R13.)

The participant continued to explain that there is a disparity between the two generations as follows:

'There is a gap between older generation and millennials and there is a need to have a plan of integrating them in the workplace as they are future leaders. There is certainly a misunderstanding as to who they are.' (R13.)

'Certainly, I mean it's so clear, I mean it's quite distinct. It's the, for me it's the age cohort that makes the difference. You find the younger, fresh, vibrant, energetic young person coming into the system will certainly mingle with their own and the distinction also is physically manifesting itself in workspaces, in the meetings they will always be together whereas the older ones you will easily recognise them by age or by the way they dress or the way they interact with more senior people.' (R6.)

The fundamental difference between the two generations is due to the younger generation being more technologically savvy than the older generation:

'I have got a young manager and he is good, right, uhm, and his style of management, his style, he gets things done by working with a phone. And then I have an older manager who is averse to using a computer but he has got no email that is not up to date.' (R12.)

Explaining the difference between millennials and the older generation:

'[T]he difference besides the technological difference, it is the thinking. And we ... the millennials, their thinking is based on what they see currently, and whereas the baby boomers, they consider their history and it is the history that is holding them back in term of implementing things.' (R8.)

The difference between millennials and the older generation could be the result of the older generation having certain expectations of how millennials should behave in the workplace:

'I can just say those are young people that are technology savvy, uhm, uhm, to them, technology come as their second nature.' (R5.)

The responses indicate that there is a significant gap between millennials and the older generation and a lack of commitment from the leaders to understand millennials as a generation in order to make the working environment more conducive for them. Thus, the emerging theme from the above is misunderstanding of millennials and lack of a culture which is inclusive of millennials. Pertinent to the study of millennials, municipal leaders were requested to share their experiences on the challenges and benefits of leading millennials.

This was crucial in order to enable the study to analyse whether there is a correlation between their experience of leading millennials and their lack of commitment to preparing the working environment to integrate millennials. Additionally, it was to gauge the perspective of leaders who form part of the older generation:

'Uhm, they are demanding, uhm, they, uhm, you know, we still believe, uhm, in the old saying that "before you progress to the next level you need to find your feet in the space that you are in", uhm, the millennials to them it is not about spending so many years in one position, they want to advance as quickly as they can and you find that with some that are able to push through the levels uhm, of supervisory levels, management levels, you find that it comes out that you know, uhm, uhm, they hadn't really uhm, grasp uhm, so much knowledge that enables them to function adequately, uhm, in that level. And the other thing is that of maturity, uhm, because as a millennial once you assume that role of leadership, you have to be matured, you know, you have to be matured in dealing with staff issues, you know, uhm, confidentiality is the key, and you will find that a lots of millennials because, uhm, for them the conversation is something that they enjoy very much they end up, you know, uhm, in unintentionally sharing information they shouldn't be sharing.' (R5.)

The leaders in their responses found it time consuming to nurture millennials since they are focused on service delivery:

'It will require a lot more effort to retain millennials. A millennial will not think twice about giving up their day jobs and do something a bit more exciting, they are not they may not be bringing in a lot of money than this job is.' The participant further said: *'Okay, the challenges of leading the millennials is, I feel it requires a lot more uhm, effort to keep your millennials productive.'* (R10.)

Echoing the same sentiments, R6 said: *'I think it's the time constraints. Sometimes if you are working*

in an organisation where delivery priorities take up you know most of your time, the challenge is how do you devote or balance the time with a millennial? Remember they also need attention. You brought them in for the certain purpose and I think the justification is you got to spend as much time with them as you do in meeting your priorities. It's a balance that for me, what makes a difference because when you frustrate a millennial who's eager to work he is going to look for other opportunities because he needs that attention. The idea is to nurture and if you give sufficient attention to nurturing you can groom somebody to take on some good responsibilities but it's you who brought that person in, it's your responsibility, you are accountable for making sure that you bring that person up to a certain level.'

The constraints, other than time, of leading millennials were explained as follows:

'Yeah I think some of the challenges are in working with them that your hands are tied to what you can offer them as incentives and motivation to do things. So it's a bit difficult in this environment, constraints we have. We don't have the flexibility or power to offer certain things that we would ideally offer to encourage.' (R4.)

A different perspective was:

'From my side honestly I haven't seen any challenges. Maybe it's because I am a millennial myself and I work well with millennials. Instead I can see that older generation especially in the municipality find it challenging to work with them. Or shall I say to manage them because the culture of the municipality is to manage rather than to lead. Very few are leaders and I think that on its own is a challenge because I believe millennials prefer to be led than to be managed. In an environment like ours, they will find it challenging to work with them due to their stereotypical ideologies about millennials. They have to accept that times have change and embrace them. So in a nutshell what I think is a challenge of working with millennials is misunderstanding of who millennials are by the older generation and that's what need to be addressed. They are not a challenge but need to be accommodated and integrated in the workplace especially from a talent management perspective.' (R13.)

Emanating from the above responses, it can be said that municipal leaders have not invested in millennials, who will be the future municipal leaders, especially from a talent management perspective. The priority is on service delivery and there is no programme designed to ensure integration of millennials into the municipality. Ultimately, the emerging theme from the above responses is that the integration of millennials is not a priority in the municipality. Linked to the challenges of leading millennials is the benefit of leading them. Leaders were thus engaged on the benefits of leading millennials, particularly as the country is advancing into the fourth industrial

revolution. Hence, the next question dealt with the benefits of leading millennials in order to assist the municipality to create a balance between operational requirements and nurturing millennials as an asset to the organisation:

‘They are innovative, understand technology, flexible. I think they like to learn and explore new things. They are not rigid. They are always motivated. They are solution driven. But as I said, I doubt as to whether the municipality has enjoyed those benefits as most of the critical and strategic positions are not occupied by millennials.’ (R13.)

Millennials have a drive to get things done, and leaders expressed their experiences with millennials as follows:

‘[W]hat I have found and I have a few of them in my operation is that I kind of appreciate their willingness or their spirit of getting things done.’ (R7.)

‘Millennials, they are more fast paced.’ (R3.)

The benefit of working with millennials is that they are fast paced compared to the older generation, and leaders stated that they have quite a number of millennials in their teams which is beneficial in this way:

‘I find it very interesting to work with them and even having like, general conversations with them, they make you see things in a different perspective. Uhm, the other thing that I like about them is the pace they work in. It is unlike us the baby boomers, for them if they want to do something, it must be done today not tomorrow.’ (R8.)

‘[T]he younger guys, look, they bring a sense of, uhm, a sense of the new thinking breaking a little bit of breakings the barriers.’ (R12.)

It appears that the leaders acknowledge that it is beneficial to the municipality to have millennials because they bring a different dynamic to the organisation and they challenge the status quo. The emerging theme from the responses reveals that millennials are the generation that is able to bring about a positive change to the organisation. Having established the relevance of millennials to the municipality, leaders were asked to share their opinions on how they can best utilise millennials in the municipality. The responses from the leaders gave an indication that the municipality has to use a talent management approach to best utilise millennials in the workplace:

‘I think that we do need to see more millennials in senior positions, uhm, we need to identify talent, like talent management programmes, talent management to identifying programmes for development.’ (R12.) ‘That’s simple, give them an opportunity. Perhaps our talent management

section should develop a talent management plan inclusive of millennials. As part of succession planning especially in the executive positions, millennials should dominate. We need people who are innovative in those critical positions. We do not need people who will only do bare-minimum. Otherwise, organisations like Ethekwini Municipality will not move forward.’ (R13.)

‘[T]here is an obligation also to respond to the younger generation both from a talent management side and also from an ageing HR pool because nobody is in an organisation forever, you’ve got to have some mechanisms in which you bring in young recruits you know, with academic qualifications and provide them with work experience so that there is easier, how can I say, process of ensuring that there is continuity in the workspace.’ (R6.)

Another pertinent point relating to talent management that was raised was that the older generation is ageing and that there is a need for skills transfer:

‘[T]he city has to realise that the millennials, I am sure you are aware that, uhm, the millennials are beginning to make in rules, they are in many in the organisation, they are now up to 60% of the workforce. Uhm, if you do not want to hand over the bait to them now, you might have a problem of a gap, down the stream. So, it is important that you begin to, uhm, bridge that gap now so that whilst we are here, we may be left with 10-15 years before we retire but we should have that kind of a hand over to them, because 1015 years down the line it will be their responsibility to lead the organisation. Uhm, so, I think one other gap that the municipality has to look at is that of, uhm, handing over or transferring skills, uhm, from the older folks to the millennials, the new generation. Uhm, we do not have a formal programme to do that, uhm, we do have a monitoring programme that we maybe need to strengthen here and there so that it also addresses that particular point. Yah.’ (R7.)

The need to lead millennials based on their strengths and to develop them to enhance their weaknesses was also canvassed:

‘I think; we have to tap into peoples’ strengths plus managing peoples’ expectations. And, so, where fresh perspective is required, try and tease those out of millennials in a constructive way. Where, uhm, a lot of energy maybe required try and harness that in a constructive way. Where, uhm, certain generation specific skills exist in greater density like social media, tap into that in a constructive way. Uhm, and other skills which may exist in a millennials base in greater density or greater proficiency, uhm, tap into those in constructive ways. And then the managing of the expectations, whilst we have got these things like, uhm, talent management framework concept processes and so on, I don’t think they are well implemented. Uhm, I think the whole organisations just plays lip service on to it.’ (R9.)

A need to create innovative and creative programmes to empower millennials was expressed by R3 who said: *‘You need to develop, uhm, innovative and creative programmes across the municipality where they have an opportunity to participate in, even if you need to actually create, uhm, a branch a section that looks at innovation and creativity.’* (R9.)

The Ethekewini Municipality has a talent management section; however, it was evident that the organisation does not have a talent management framework to integrate millennials into the organisation. Hence, the leaders recognised that the organisation must utilise a talent management approach to best utilise millennials in the Ethekewini Municipality. The emerging theme from the responses is that the municipality does not have a talent management framework to integrate millennials into the municipality. Linked to integration of millennials, the leaders were asked to give responses whether they had prepared the working environment to integrate millennials. The majority of responses from the leaders (10 out of 15 responses) gave various reasons and opinions on why they felt that the Ethekewini Municipality has not prepared the working environment for millennials:

‘No. I think they’re clueless about it. I think they’re clueless about millennials and their needs. There’s so much pressure on the leadership to do things that have nothing to do with this. Ahm, there’s so much pressure to deliver.’ (R4.)

A similar response was given which corroborates the view shared above that leaders do not know millennials and may not be interested in them and expresses the view that the focus of the organisation is on service delivery. The participant said:

‘Definitely not. Do they even know who they are? Are they interested? Is it something of interest to them or is it something necessary to consider as part of moving the municipality forward? I really don’t think so. I haven’t seen anything relating to millennials in the municipality. Generally, I don’t think that the municipality places much value on the human aspect of the organisation. If they were, surely the issue of investing in millennials would have been picked up long time ago. As long as you do the job and get paid at the end of the month, that’s all what matters.’ (R13.)

‘No, maybe a very simplistic answer is to say no.’ (R3.)

‘[N]ot at all, I think the Ethekewini Municipality is a difficult environment.’ (R14.)

One of the participants felt that the organisation is not prepared for millennials and explained the characteristics of a leader, a millennial and their personal values:

‘No, maybe a very simplistic answer is to say “No” but what actually mean also again, it depends on where the position as leaders but I think bigger influence actually is and not forgetting that the

leaders are often have their own families and often the domestic influence actually also spills over into the work environment.’ (R3.)

It appears that the leaders of the Ethekewini Municipality have not given millennials the attention they deserve within the organisation; hence, they have not prepared the working environment to integrate them. A participant made recommendations that the municipality must conduct research on this topic and shared that there is a need for a study like this for leaders to begin thinking about millennials:

‘As I said, there is no platform for us to even have this discussion. You know, so I am hoping your paper can actually start creating these, even our IT guys “super” old, I am hoping you are going to interview.’ (R11.)

A similar view was expressed that the municipality needs to conduct more research on whether the working environment has changed in order to integrate millennials:

‘No.’ (R10.)

The participant was probed further on what the Ethekewini Municipality should do to prepare the working environment for millennials:

‘I think, this is the way you will come, they need to engage in more research on how the work environment has actually changed.’ (R10.)

‘I can say this is where the gap is. Certainly we haven’t pay sufficient attention to that. You bring in the person and the person learns on the job. So you haven’t taken conscious effort to prepare that space for that person.’ (R6.)

It can be said that the municipality has not prepared the working environment for millennials. The theme emerging from the responses is the lack of readiness of the Ethekewini Municipality to prepare the working environment to integrate millennials. Having explored the narrative of the data regarding millennials, the next section explores leaders’ perspectives on the fourth industrial revolution.

5.3 Interview Data: Municipal Leaders on the Fourth Industrial Revolution

The participants were asked to share their understanding of the fourth industrial revolution. The responses were varied; however, most participants felt that the top management of the organisation do not fully understand the fourth industrial revolution and thought it was merely a buzz word.

‘That term has become a national anthem. It’s a buzz word. Everyone is talking about the fourth industrial revolution even our government leaders. As to whether they understand what it means, that’s another story for another day. I do not have a textbook answer but will simply answer it from what I’ve heard in the news. It is basically an advancement of technology characterised by innovation that disrupts how things are normally done and fusing the physical, digital and biological worlds. Of lately you can’t separate people from technology. Building up from the third industrial revolution, it’s more about digitalisation, robotics and artificial intelligence. That’s my understanding of the term fourth industrial revolution.’ (R13.)

The same view that the workplace has not grasped the concept of the fourth industrial revolution was shared by another participant who explained:

‘Our workspace in the city hasn’t really grasped the realities of four IR. We speak about it a lot, get excited about it a lot, we good in lobbying and advocating but in terms of implementing and making the change I think this is where the government is seriously lacking.’ (R6.)

Another participant corroborated this view and expressed a dislike of how the term has been used within the Ethekewini Municipality. The participant said:

‘I feel that term has been branded everywhere. It is a very nice catch phrase (4 IR). To be honest, I am not sure what the fourth IR is, I know that it is signalling a different way of working.’ (R10.)

A participant referred to the Ethekewini Municipality as a slow-paced organisation that has not grasped the fourth industrial revolution and explained as follows:

‘Oh no, it hasn’t. Like I said, it is a slow-moving institution and also it is an intangible at this point. I think the fourth IR is still an intangible in this point, it is a buzzword.’ (R1.)

Sharing the same view, another participant said:

‘Okay, so, I think from the fourth industrial revolution, the city, so it is a buzz now, everybody talks about it. But, how do we practically put this into action? How do we extract value in terms of understanding our employees better, doing our work better, there is, uhm, the city, needs, there is a need for intervention and I don’t want to pre-empt what you are going ask next but I am sure, the question is “What else can we do?”’ (R14.)

It was evident from the responses above that the organisation has not sensitised its workforce on the fourth industrial revolution and what it means for the employees and the workplace. The majority of the participants explained the fourth industrial revolution from their own understanding and shared a common view that the leaders of the municipality were using the term as a buzz word. It appears

that the Ethekewini Municipality has not prepared the working environment on the practical integration of the revolution into the workplace. The emerging theme is that leaders of the Ethekewini Municipality lack an understanding of the term fourth industrial revolution. Having shared their views on the term fourth industrial revolution, it was necessary to engage leaders with a view to assessing whether the fourth industrial revolution has made an impact on the working environment. Of interest, the majority of the participants answered this question based on how they think the fourth industrial revolution will impact the Ethekewini Municipality if it were integrated into the workplace, indicating that the revolution has not yet been practically integrated into the municipality:

‘Yah, I think we could get smarter in a lot of things.’ (R12.)

‘Yah, I think right now its immediate impacts are minimal, But, I do not think it is going to stay that way. I think its impacts will either be engineered constructively, intelligently by the city going forward. Or its impact will just land and the organisation will react uhm, behind the frontier of change. And, that reaction then maybe be too emotional or too political, uhm, or too unionised, so it is going to happen, when is a million-dollar question. It will impact, when is a million-dollar question. Is it impacting right now? Not really, should it? Yes, it should. Uhm, how could we bring more intelligence and uhm, let us call it machine assistance into play? We should be thinking about those things now.’ (R9.)

A participant expressed that it is difficult to assess the impact of the fourth industrial revolution in the Ethekewini Municipality because the organisation has not integrated the revolution:

‘From the municipality point of view, nothing has been done regarding the integration fourth IR. So one cannot assess its impact in the municipality. Maybe the management has talked about it somewhere but I am not aware of any action or programme of action to integrate fourth IR in the municipality. In any event we still have a long way to go as we are far behind from technology point of view.’ (R13.)

The answers to the question gave an indication that the fourth industrial revolution has not made an impact on the organisation because the leaders have not integrated the fourth industrial revolution into the municipality. Following on this, the leaders were asked to share their views on whether millennials are influenced by the fourth industrial revolution in the Ethekewini Municipality:

‘It’s difficult to answer that question from a municipal perspective as millennials are not integrated in the municipal strategy or plan of activities as I have said earlier on. In my view, they are not given necessary opportunities, as such, one cannot determine whether indeed they are influenced by fourth IR in the municipality. But generally, I would say yes they are influenced by fourth IR. In fact, as I

have said, you cannot separate the fourth IR from millennials. They are technological savvy and they are always either on the phone, computers or exploring internet and social media. As we talk of robotics and artificial intelligence, you may find that millennials have a better understanding of the impact thereof than older generation. They are therefore heavily influenced by the fourth IR in general.’ (R13.)

The participant referred to millennials as the fourth industrial revolution and said:

‘I, actually think the millennials, they are the fourth industrial revolution, right because from the youngest in our days, they are working with apps, they are doing coding.’ (R11.)

This view was supported by another participant who said:

‘Look, I would say so. I would say so because it is built into their DNA if I could put it that way because they are driven that way, they are driven by using technology, smarter technology.’ (R12.)

The fourth industrial revolution has empowered millennials to become agile which is an advantage for them compared to the older generation:

‘They are more comfortable with devices in their hands for longer periods. They are more comfortable with the rapidity with which the information flows. They are more comfortable with, uhm, probably speaking their mind which is not always a good thing. They are, they are getting more of, uhm, techy skills, uhm, than the older generations are, whether they are self-reliant.’ (R9.)

The emerging theme from the responses above is that millennials are influenced by the fourth industrial revolution. Hence, it was important to understand from the leaders how millennials should be led in this revolution to ensure that the municipality retains them in the organisation. Responding to that question a participant explained the characteristics of the leader who should lead a millennial in the fourth industrial revolution era as follows:

‘Interesting, there has to be a mind shift change, I think it’s also about unlocking your mind. Sometimes we are prisoners of our own destiny. So if you are stuck in your own ways then you going to die in that way unless you are flexible. I think it’s about being flexible, it’s about mellowing and it’s about keeping in touch also because if you think what you did 20 years ago will work now then you are at the wrong space. It’s also about embracing change.’ (R6.)

‘Uhm, you will need a millennial, you know they say “you cannot teach an old dog new tricks”? I think we have very few leaders that are adaptable to change and I am not saying it is because they are inheritably incapable of adapting their management and leadership style.’ (R7.)

'We need leaders that do not take offence to an employee having a voice, for an employee advise him that he or she feels that the approach is not correct.' (R10.)

The participants suggested various leadership styles that leaders can adopt to lead millennials, and one said:

'Uhm, therefore one point would be avoid using the old conventional type of leadership styles and then adopt the newer like transformational kind of leadership style. Your charismatic kind of ... these guys ... for an example, if you think of charismatic kind of leadership. They like to work where they are happy. So, charismatic leaders are capable of tickling them to such an extent that they cannot realise that they are working, so as long as they have that happiness you will always be good to them. That is charismatic leadership but also, remember I said situational leadership as well is important because it tell you that in a particular situation there has to be specific way to react to that. It does not have to be like all lazy kind of a relationship with your young ones. At some point you need to be strict with them to say "No" the line stops here, you cannot cross here.' (R7.)

The type of leader that should lead millennials was expressed as follows:

'Uhm, I think the leader that should lead the millennials needs to be very versatile or yah, versatile leader. Someone who has transformation in mind. Uhm, like someone who is very flexible, uhm, I think that type of a leader will work well with the millennials because that person can adjust to different situations.' (R8.)

In order to lead millennials, the leaders must understand the millennials as a generation and:

'... must know what motivates them, what keeps them interested and also what, how do you control and manage them as well without, without like, uhm, killing their spirit, without trying to put them into your own pockets and know how to harness their knowledge, their skills, their enthusiasm and channel that into the right directions. And to sort of have those interpersonal skills and leadership skills to understand how they can deal with these youngsters' (R2).

Millennials require a leader who can listen to them, be consistent, fair and transparent while accommodating and integrating them in the workplace. They require leaders who are adaptable, transformative, inspirational and entertain new ideas as millennials are innovative. They need true leaders who can support and motivate them.' (R13.)

The emerging theme emanating from the responses of the leaders indicates that the Ethekwini Municipality will need to adopt a mixed leadership approach to integrate millennials into the workplace. Millennials require a leader who has a variety of characteristics to keep them motivated

and engaged in the workplace. This is crucial in this study as the ultimate goal is to develop a leadership model to integrate millennials and the fourth industrial revolution.

Leaders were further engaged on whether the fourth industrial revolution can be used to attract and retain millennials. The responses from the leaders seem to suggest that the non-integration of the fourth industrial revolution in the Ethekewini Municipality will lead to the organisation not being able to attract or retain millennials:

‘No, not at all, I don’t think, it will because our approach, as I said. Is, we still would want and embrace people with conventional qualifications.’ (R7.)

A similar view was expressed and explained further to say that millennials get frustrated and leave the organisation because the working environment is not conducive to their retention:

‘I really don’t know. As I said, it’s difficult with the municipality as nothing has been done. I don’t know whether our HR particularly talent management section is doing something in this regard. But as things stand, I believe millennials are frustrated as the environment is not conducive for them. Consequently, they would want to join organisations that are more technological savvy and aligned to what they believe in. With the investment in technology and leadership that is receptive of them and aligned to technological innovations, certainly the municipality will attract and retain them.’ (R13.)

Millennials will leave the organisation if the Ethekewini Municipality does not align to the fourth industrial revolution:

‘Millennials have the propensity not to work too long in an organisation, so whilst they are in this organisation, they should also feel confident that the experience that they are requiring is going to help them to seek further employment but there is no conscious effort being made at the moment.’ (R14.)

This view was supported by a participant who elaborated that the millennials will leave the organisation if the working environment is not flexible in the fourth industrial revolution era which requires employees to have multiple skills and encourages them to earn their income from a variety of jobs:

‘Definitely, I think we are going have a high turnover in all organisations because people will be coming in and they will be going and rightly so, people need to be exploring, so that is why I am saying I am not sure if the country is ready of people having multiple uhm, income streams whereby they are working in various areas and it is because people, if I work four hours in the city, I am a

consultant for two hours somewhere else, I am also business owner somewhere. It is multiple steams, but you will find that there is a lot of red tapes especially when you work for government.’ (R15.)

The leaders made reference to the fact that the fourth industrial revolution will disrupt the attraction and retention of millennials from a technology advancement perspective and will challenge the normal way day-to-day operations are conducted. The emerging theme is the relationship between the fourth industrial revolution and talent management of millennials. The challenges and opportunities presented by millennials and the fourth industrial revolution were explored to comprehend how the revolution has affected the Ethekewini Municipality:

‘The fourth industrial revolution brings about disruption in the world of work as it demands that we move with speed towards doing things differently and in a more technological way. While this is good, it may pose challenge especially from human capital point of view as some of the things done by human will become redundant. Millennials on the other hand comes with fresh ideas and are technological savvy as compared to older generation. As such, they are seen as a threat to them thus posing a challenge to a certain extent. As a result, they are suppressed by most leaders while they are more relevant in this digital era and are the future.’ (R13.)

‘I think there’s unlimited opportunities. In terms of delivering services, fourth industrial revolution can help big time in interactions with your stake holders, the public, just the basic communication, the way you deal with the issues. A lot of it is just communication actually. Understanding their needs and communicating what you are doing, knowing things before they happen. Proactively dealing with the communities. I think the fourth IR can deal with a lot of our problems, however, it also has risks because of our society’s history like non-payment for services, vandalism, so the more you put technology out there, the more risk you get, like we are looking at smart meters, which is great.’ (R4.)

The fourth industrial revolution would certainly disrupt the Ethekewini Municipality and force change to take place in a manner that will benefit the organisation:

They would be forced to change and in a revolution it is not a request to change, you are being forced to change. People revolved so things can change, so, the system revolves so institutions can change and part of it is that that generation will happen where we become incompatible with our society, the mediate society, but we become incompatible with our citizens, we become incompatible with our world and the global interchanging world and when that happens, then we will change. But also, there is an internal change that will happen because you will get guys like myself going to really high leadership positions, for example, of running the city itself.’ (R1.)

These responses indicate that the fourth industrial revolution will certainly bring about both threats to and opportunities for the municipality. The theme emerging from the responses is workplace disruptions in the era of the fourth industrial revolution. The readiness of the Ethekewini Municipality to integrate millennials and the fourth industrial revolution was discussed and the responses were recorded as follows:

‘No, the municipality is not ready. It’s all about planning and be open to the changes happening around the world particularly in the workplace.’ (R13.)

A participant made reference to other municipalities and shared the same view as the previous participant, saying:

‘No, we don’t have. So, as an example, part of our, we have something called public participation or community participation where we try to get communities to participate in our policy making process, in our plans, in our budgets, but how do we do it? We go to city halls, municipal halls and going there to people. Do you think millennials have time to go to a hall? They don’t have that time, right. We haven’t changed our forms of engagement, see. We need an app, a city app, where people could contribute to a policy. We do have Facebook, we do have social media, but we cannot really understand and manage the feedback that we get. So, we need proper systems. Proper systems that are able to listen and get feedback and accept that feedback that comes from those systems, but we are not there as an institution because, again like I said, it is a very rigid institution who takes time to change and I am not just talking about Ethekewini only but I am talking about a lot of municipalities, government institution and so on. They take time to change.’ (R1.)

The leader further expressed strong personal views of the time it will take the Ethekewini Municipality to be ready to integrate the fourth industrial revolution and said: *‘[I]t will take forever. I am being honest with you, as a municipality we still struggling with, uhm, obtaining and, uhm, enabling system, HR information system that is integrated, so, if we are still struggling in that front, how are going to get the facilities, how are we even going to get there? If we are still failing to get something that will enable us to get a robust system that will enable us to take care of the needs of our employees. I don’t see us even in the next five years, I don’t see that happening, perhaps 10 or 15.’ (R5.)*

The leaders shared a common view on the readiness of the Ethekewini Municipality to integrate millennials and the fourth industrial revolution. The emerging theme from the responses is the lack of readiness to integrate millennials and the fourth industrial revolution in the Ethekewini Municipality. In closing the leaders were requested to share their opinions of whether the integration

of the fourth industrial revolution will enhance the long-term strategic objectives of the Ethekwini Municipality. The leaders all shared the similar view that indeed the integration of the fourth industrial revolution will enhance the strategic objectives of the municipality:

‘Undoubtedly, undoubtedly, because we know the demographic profile of the city, we know that we are going to have more and more millennials, uhm, we know, that the millennials are very comfortable with social media and that kind of technology, so we need to find solutions that resonate with them, uhm, that makes them comfortable but more importantly always look at how we all improve efficiency, how we improve, better decision making, how do we improve better management of what we do by using the fourth industrial revolution, getting our workers as well maybe not going to be millennials to be participating in that space.’ (R14.)

Referring to the 2030 strategy of the Ethekwini Municipality, a participant shared how the fourth industrial revolution will enhance the strategy and said:

‘Certainly, it will. The municipal vision is to be Africa’s most liveable city by 2030. To me liveable means being civilised, pleasant and accommodating and those characters talk to technological advancement and being inclusive. By 2030, leaders in the critical position will be millennials of today. Surely by 2030, technology will be on another level. Investing in technology and integrating millennials now will therefore enhance the long-term strategic objectives of the municipality and ensure that municipality remains relevant and on par especially from a technological point of view.’ (R13.)

‘Yah, it will, because, look at the moment the vision is 2030 vision, to be the most caring city etc, but I think even that vision is a bit too shortsighted because, you know, you look at 2050 because you need a visionary at least 20-50 years ahead and then do more scenario planning as to what the future will look like and then work backwards as to how to achieve that future.’ (R3.)

Millennials will have a positive impact on the Ethekwini Municipality to achieve its strategic objectives, and a participant said:

‘[T]he experience that the young minds bring is creativity and innovative which is needed by the city.’ (R3.)

The 2030 strategy will be enhanced by the use of technology:

‘The long term, some of our long terms strategic objectives for Durban to be the most liveable places, let’s take that, how will it happen? By using certain forms of technology.’ (R12.)

Consequently, all the leaders affirmed that the fourth industrial revolution would positively enhance the long-term strategic objectives of the Ethekewini Municipality. The emerging theme is the role of the fourth industrial revolution in enhancing long-term strategic objectives in the working environment.

5.4. Conclusion

In conclusion, it appears that millennials are not given necessary attention in the working environment particularly in the Ethekewini Municipality. In addition, it seems that there is no proper plan for the integration of the fourth industrial revolution into the municipality. Clearly, millennials are not understood and not given opportunities by municipal leaders and there is a gap between them and the older generation. As a result, it becomes a challenge to lead them and to experience the benefits of working with them. From the fourth industrial revolution perspective, it appears that the municipal leaders have different narratives of what it is and have not done much towards its integration in the municipality. Thus, the environment is not conducive for them and the fourth industrial revolution; this will be further demonstrated in the findings which reveal that millennials are influenced by the fourth industrial revolution, and they are technological savvy which is required by the municipality to create a conducive environment for them. Based on the responses recorded from municipal leaders who participated in this study, it can be said that municipality is not ready to integrate millennials and the fourth industrial revolution and there is no leadership approach to integrate the said technological advancement and millennials into the municipality. There is therefore a need to develop a leadership model to address the aforesaid challenges. Additionally, municipal leaders must adopt practical plans which include change management programmes and inclusive talent management to integrate millennials and the fourth industrial revolution into the municipality. The next chapter deals with the findings from the interviews, questionnaires and the focus group.

CHAPTER SIX: RESULTS

6.1. Introduction

This chapter presents the findings of the data collected through a mixed methods approach. Semistructured in-depth interviews were conducted with the leaders of the Ethekewini Municipality for the qualitative data collection and a questionnaire was administered to millennials who work for the municipality in various clusters for the quantitative data collection. The global coronavirus pandemic disrupted the completion of the gathering of data, due to the national lockdown imposed by the South African government to curb the spread of the Covid-19 virus. To mitigate any gaps that might have been created as a result of the disruption, a focus group was added to the study. The focus group was conducted electronically and comprised of six employees who are millennials. The themes presented emerged from the interviews with the leaders, the focus group with the millennials and the statistical data gathered from the questionnaire. The responses from the interviews and the focus group were coded and categorised based on the questions posed to the participants. The questionnaire was administered to further engage millennials on the topic to obtain a holistic understanding of their experiences at the municipality. The findings emanating from the interviews with the leaders are presented in conjunction with the focus group. The questionnaire provides an overview of the experiences of millennials in the municipality pertaining to various aspects of the organisation.

A graphical representation of the demographic information from the questionnaire and the focus group is displayed below to demonstrate that the participants are millennials. The participants in the focus group consisted of six individuals who are millennials employed by the Ethekewini Municipality. The participants were selected primarily based on their age; however gender was considered to ensure that there was balance in the views shared on the topic and to gauge whether both females and males shared the same experiences in the workplace.

6.2. Emerging Themes

The findings emanating from the interviews are presented in conjunction with the responses from the focus group.

6.2.1. Themes: Interviews with Leaders

The use of direct quotes from the interviews was used to identify pertinent points and themes. From the leaders and millennials, seventeen (17) main themes and two (2) subthemes were identified as follows:

Table 6.1: Themes and Sub-themes

| | |
|----------------|-------------------------------------------------------------------------------------|
| Theme 1 | Personalised leadership styles |
| Theme 2 | Inconsistent comprehension of the term fourth industrial revolution |
| Sub-theme 2.1 | Diverse understanding of the term millennials |
| Theme 3 | The municipality and red-tape culture |
| Theme 4 | Political interference |
| Theme 5 | Differences in attitudes and work ethic between millennials and the older eneration |
| Theme 6 | Readiness of the Ethekwini Municipality to integrate millennials |
| Theme 7 | Development and empowerment of municipal leaders |
| Theme 8 | Need for change in mind-sets |
| Theme 9 | Leaders' perceptions of millennials |
| Theme 10 | Development programmes to nurture millennials |
| Theme 11 | Insufficient technological transformation |
| Theme 12 | Futuristic viewpoint of the fourth industrial revolution |
| Sub-theme 12.1 | Embracing the fourth industrial revolution for strategy implementation |
| Theme 13 | Automation and potential loss of jobs |
| Theme 14 | Ineffective attraction and retention strategies for millennials |
| Theme 15 | No commitment to integrate the fourth industrial revolution |
| Theme 16 | Promotion of mixed leadership styles |
| Theme 17 | Covid-19 and the advancement of technology |

6.3. Theme 1: Personalised Leadership Styles

The leaders of the Ethekwini Municipality shared a common view that individual leadership styles and management styles are used in the organisation based on a leader's personality and the situations the leader faces at a particular time. It further emerged from the responses that the municipality does not have a common leadership style across occupational levels to integrate millennials and the fourth industrial revolution. The same sentiments were shared by the millennials who participated in the

focus group that the leaders lead others based on the output they need to deliver and on a situational basis. Thus, the participants seem to suggest that the organisation has not prioritised leadership development nor has the organisation considered creating an environment that shares a common leadership style that all leaders can follow and adapt to:

‘Everybody is doing their own thing and I think everybody, the word I am looking for is, I think we are situational managers.’ (R11.)

‘Uhm, to be honest, the municipality doesn’t have one approach or style of leadership that has elevated to become “THE” leadership style of the city.’ (R7.)

‘We have a sort of top down approach where, you know, the senior management tells the staff what to do. There may be people there that use a different approach. I use a different approach.’ (R1.)

‘I said situational leadership as well is important because it tell you that in a particular situation there has to be specific way to react to that.’ (FG7.)

6.4. Theme 2: Inconsistent Comprehension of the Term Fourth Industrial Revolution

The participants in the interviews seemed not to have a common understanding of the term fourth industrial revolution since the organisation has not integrated the revolution into the workplace. Some of the leaders gave their own interpretation of the term fourth industrial revolution and they gave an indication that these definitions are based on information gathered for their own knowledge. It was evident that the responses given were from information that was sourced from the internet, newspapers and television.

‘I feel that term has been branded everywhere. It is a very nice catch phrase (fourth IR). To be honest, I am not sure what the fourth IR is, I know that it is signalling a different way of working.’ (R10.)

‘Okay, fourth IR, for me, it means automation of things making life easy, uhm, not necessarily cutting off jobs, but making jobs much easier. And, increasing productivity because once you have all your systems working, uhm, the productivity also increases.’ (R8.)

‘I think it is different way of doing things, we will rely a lot on our information system, we will rely a lot on technology, it is a way of working smarter with less human capital in the world. That is how I understand the fourth industrial revolution.’ (R10.)

‘4 IR!! It is, I think it is digital world, it is all digital world, it is uhm, artificial intelligence, it is uhm, virtual, using virtual reality. So for an example 4 IR sort of incorporates a virtual on-boarding programme, or induction.’ (R2.)

A millennial who participated in the focus group shared the view that leaders do not understand the term fourth industrial revolution and its impact in the corporate environment:

‘From top management to lower management spheres, it is not ready. Even the comprehension of the term, I don’t think it is at the level where it fully comprehends what it means in a corporate environment, to be in that kind of a space.’ (FG5.)

6.4.1. Sub-theme 2.1: Diverse Understanding of the Term Millennials

The leaders of the municipality gave varying definitions of the term millennials which were based on their own understanding and not necessarily from an organisational perspective. The majority of the responses were based on what an individual had heard of the term millennials. It appeared that the leaders associated millennials with young people and the responses were based on what each leader perceived was a millennial. The responses provided by the leaders associated millennials with the year in which they were born, their age, their love for technology and what they have observed as their particular characteristics. It was evident that the leaders and the organisation have not taken the time to understand the various generations that have joined the workplace, particularly the Ethekewini Municipality that employs a large majority of millennials:

‘Ja, my understanding of millennial is somebody who is coming to the world full of energy, wanting things to happen and sees a world in a very different space as compared to somebody whose been in an organisation for a very very long time. So the millennials are for me those that had been born in the 80s if I understand and want to make a change but don’t want to stay in an organisation for far too long and are easily frustrated, full of energy and want to see change happen, and also at the same time don’t want to be bossed around, they don’t want to be pushed around, they want to be recognised for their efforts and they want their contributions to be appreciated.’ (R6.)

‘They are people younger than me definitely.’ (R4.)

‘I just know that, uhm, you have people depending on the time they were born. They are regarded as in a particular category so, people born in 1963, I would be a baby boomer, so millennials will be people born, I would assume in the, from the year 2000.’ (R7.)

‘I think between the years 1980-2000, if I am not mistaken, but stand to be corrected, so those are young people.’ (R5.)

‘Millennials themselves you get different sectors, you get different dynamics because people believe in different things because they are largely influenced by technology and what is happening currently.’ (R3.)

One of the participants said:

‘When I was growing up, you had the X and Y generation, then you had the baby boomers than you going to get a generation. And the generation is different because it is probably driven through external things in the environment that makes those guys tick, right.’ (R12.)

6.5. Theme 3: The Municipality and Red-tape Culture

The responses received from the leaders gave the impression that the organisation has a lot of red-tape and does not have a workplace culture that is agile and innovative. The responses seemed to suggest that the excessive bureaucratic processes frustrate employees and impede the integration of technology and millennials. It emerged that the Ethekewini Municipality does not have an established organisational culture that determines the leadership style expected within the organisation. Most of the leaders described the organisation as transactional and bureaucratic with no room for transformation. The leaders also shared a common view that the culture created by leadership is a top-down approach, which has been practised for many years. The participants expressed the opinion that the municipality needs to develop and embed an organisational culture that incorporates the shared goal of integration of millennials and the fourth industrial revolution. The leaders who were interviewed revealed that the culture of the Ethekewini Municipality does not include any mechanisms to integrate millennials and the fourth industrial revolution; hence millennials do not feel that they are part of the organisation. The leaders asserted that as a result of the above there is a gap between the older and the younger generation. It was apparent that the older generation has not created a working environment that is receptive to the younger generation and has not invested in a culture that embraces them.

The majority of the participants acknowledged that the leadership of the Ethekewini Municipality is focused on service delivery and not on building an acceptable organisational culture. In addition, politics and the dominance of trade unions contribute to a slow-paced and stagnant working environment:

‘The leadership is really top down strong on commands and directives and I say with hindsight.’ (R12.)

‘No. We are guided however by the chain of command and by approval routes for changes to policies, to decision making.’ (R2.)

‘Look, I think we have to concede that the culture inside Ethekewini Municipality is uhm, not good. Uhm, I would go so far as to say it is almost corrosive.’ (R9.)

‘So, we still need to implement that because we have got the huge red tape within the organisation whereby for getting a pen you need to go through so many people before you buy that pen.’ (R15.)

‘The leadership style in the municipality for the last few years, especially, has changed. The culture has changed, with all the governance and control. Very stifling, just tick the boxes and if you’ve got initiative it’s quite stifled, because you have to follow the process and everything takes so long, and, it’s not a good place for, for someone with, who wants to be innovative, and you know, who wants to show initiative. It’s a good place if you just want to do the bare minimum.’ (R4.)

The millennials interviewed through the focus group mentioned that the Ethekwini Municipality must change the culture of the organisation to be aligned to technology and must adapt to new ways of conducting business. The culture of the organisation is not fast paced, which they need to thrive within the organisation, and as a result they feel demotivated. They made reference to the unwillingness of the leaders in the municipality to adopt new ideas and the leaders’ inability to cope with rapid changes and to fast track the implementation of new ideas:

‘From what I’ve seen in some of the areas that I have worked with is the difference in adoption. Millennials are more likely to accept change as it comes along, especially when it comes to technology and new systems that will make their work lighter and efficient that will provide stability and that will have greater value outcome but that is also to say the culture of the organisation does not allow such.’ (FG6.)

‘The millennials are fast paced as compared to the older generation. The second one is turnaround output, turnaround time. Millennials are from a world where they expect things to happen in a day or two and you see frustration when we have processes that drag and drag and drag, because of the technology that they grew up around, that is the world that they know where everything is quick, fast, done. Move on to the next thing. Their pace is very quick as opposed to the older generation.’ (FG2.)

6.6. Theme 4: Political Interference

The Ethekwini Municipality operates in the local government sphere and is highly unionised, as a result the leaders expressed the view that political and union influence in administration hinders decision making by top management. Some of the participants expressed the view that top management is hampered from implementing certain processes and systems by pressure to prioritise service delivery. This diverts focus from other issues, including the integration of millennials and the fourth industrial revolution. The participants also highlighted that trade unions have a huge impact on the decisions made by leaders as they have to be consulted on any decision that may affect the interests of employees. The majority of the participants shared the common view that politicians and unions within the municipality believe that the fourth industrial revolution may have a negative impact on job retention, and thus deliberately slow down the process of integrating advanced technologies:

‘Now, I can tell you that a politician just recently in anger said “We don’t want this fourth industrial revolution if it is going to take away jobs”. So, there is a need for us to do a lot of education, so we are not going to stop the fourth industrial revolution.’ (R14.)

‘The internal environment, the internal culture, the internal style is highly buffeted by, uhm, party politics, it is highly buffeted by personal ambitions and personal aspirations and it is highly buffeted by, uhm, I think significant trust deficit. Uhm, as a generalisation across most departments.’ (R9.)

‘It’s all about politics in the municipality and service delivery and not and not about how can we embrace technology in order to enhance service delivery and move the municipality to the greater heights, improve municipality to be globally competitive and to be Africa’s liveable city.’ (R13.)

‘Our main focus is on service delivery, customer focus, customer centric approach but difficult within the political dynamic every changing environment.’ (R14.)

‘Local government has got to do with service delivery and it should be people centric and that is your agenda because that is your business, your core business.’ (R3.)

6.7. Theme 5: Differences in Attitudes and Work Ethic between Millennials and the Older Generation

The responses shared by the leaders confirmed that there is a significant gap between millennials and the older generation. The leaders expressed their views based on their own experiences and observations of managing millennials in the workplace. It was evident that common misconceptions were that millennials needed flexibility in the workplace, that millennials questioned everything and required instant answers from their leaders, that millennials’ perception of what the working environment should be was different from theirs, that millennials wanted to progress rapidly in the workplace without acquiring adequate experience, and that millennials had distinct expectations on how they should be managed in the workplace. It appeared that the gap between the millennials and the older generation is based on a misunderstanding of millennials as a generation and the expectations leaders have of millennials. The misunderstanding between the generations is a result of differences in attitudes, expectations and work ethic. There was general consensus that there is a misunderstanding between the two generations but there was also an acknowledgment from the leaders that an effort must be made to understand millennials since they are the future leaders of the organisation:

‘There is a gap between older generation and millennials and there is a need to have a plan of integrating them in the workplace as they are future leaders. There is certainly a misunderstanding as to who they are. At the same time, it is important for millennials to respect older generation. Of

interest, what may be considered as disrespect by older generation may be seen as normal by millennials. Perhaps that where your study comes handy because it takes a particular kind of a leader to work with millennials. Maybe there should be constant dialogue about millennials and older generations in the workplace until such time that there is synergy between the two.’ (R13.)

‘So millennials say, I want flexible work time and the leaders in the municipality is not ready for that era because the environment does not accommodate the demands of millennials and their view of what work should be.’ (R4.)

‘Uhm, so millennials want to be parachuted to higher positions, but sometimes millennials need development and they need growth and then they can move to the next level. So, those things, I think that is where challenges are with millennials.’ (R7.)

The millennials who participated in the focus group supported the view that there is a gap between themselves and the older generation. The majority of the millennials believed that the divide between the two generations stemmed from the millennials’ attachment to technology and flexible work:

‘I think what we need is a flexibility of the organisation because the one difference between millennials and most of the previous generations before them, is the amount of flexibility that they require and they wish for.’ (FG1.)

‘The millennials were brought up under the kind of system, they started asking questions and wanting answers and thinking of new ways and effective means of doing things, and you know, that is where I think the difference lies. With the older generation, it is more about how things have been done.’ (FG6.)

‘The millennials are not into managing the individual but they are into managing the performance or the outcome that the individual can provide the organisation, whereas with the older generation you are more likely to see the management concerned about a good or performing employee by the amount of time they see you at the office or they see you present in front of them.’ (FG5.)

6.8. Theme 6: Readiness of the Ethekwini Municipality to Integrate Millennials

The principal focus of the Ethekwini Municipality is ensuring that services are delivered to communities on time and that the basic needs of the communities are met. As a result, leaders place less significance on the workforce and its needs. It was evident that the leaders have not placed millennials on their priority list because of pressure to deliver services. As indicated above, it was apparent from the leaders’ responses that the municipality has not prepared the working environment

for the younger generation and is not ready to integrate them into the workplace. The leaders admitted that they are occupied with day-to-day operations and have not prioritised millennials.

The workplace is not innovative and does not allow millennials to use their skills in the organisation. It emerged from the interviews that the leaders themselves have not been prepared to lead the millennials, which contributes to the misalignment of the millennials and the older generation:

‘Only leaders balance human capital and organisational needs. Ethekewini Municipality is therefore not ready to integrate millennials as the management have not prepared the environment for them.’ (R13.)

‘Uhm, you know, the older people obviously have their own challenges with leadership, in our organisation, you need somebody who is mature to be able to lead in the generational gap to be successful.’ (R15.)

‘So there is a lot of frustration because, I mean it is interesting that you choose a municipality to study something like this because you are talking about a draconian institution that is hell-bent to keep their status quo the same in terms of how it does things and it takes a long time for an institution of government to change and you are talking about millennials, people who are very dynamic.’ (R1.)

The millennials interviewed in the focus group concurred that the leaders of the Ethekewini Municipality are not ready to integrate millennials nor have they prepared the workplace for the younger generation to fit into the organisation:

‘The organisation is driven by the rules and regulations, which is the conditions on how they do things, you will find that some policies that were adopted many years ago and when things are changing nothing in in the municipality is changing you find out that majority of the people are the old age group. And, you find out that there are less youth that are developed in terms of top management so that they can be able to have their opinions heard.’ (FG3.)

‘The young generation have a lot of experience with technology and have knowledge of how things are done in terms of systems and technology. The older generation lack this experience in the Ethekewini Municipality which creates an environment where the younger generation cannot optimise their skills.’ (FG5.)

The millennials were asked if the Ethekewini Municipality has prepared the working environment to integrate millennials. The majority of the responses confirmed that the organisation is not ready to integrate millennials into the workplace:

‘I am saying no.’ (FG1.)

‘No, it has not.’ (FG3.)

‘No, a lot still needs to be done, we are not a priority.’ (FG4.)

‘No, the municipality has not prepared the working environment for millennials.’ (FG5.)

‘No, the municipality has not.’ (FG2.)

6.9. Theme 7: Development and Empowerment of Municipal Leaders

The leaders acknowledged that they are not equipped with the expertise to lead millennials – this was not a priority within the organisation, it has been overlooked and it is business as usual. It appeared that departments such as Human Resources, Talent Management and Change Management have not yet presented a strategy on how leaders should be leading in the fourth industrial revolution space and in an organisation largely dominated by millennials. The leaders have been exposed to a culture that does not promote innovation and operates in a transactional manner; hence, leadership development was highlighted as a means successfully to integrate millennials and the fourth industrial revolution. The leaders recognised that millennials are different and require a different leadership approach, thus the need for the municipality to develop a leadership development programme to address this divergence. It appeared that there is no synergy between the millennials and their leaders because of the vast differences in their experiences, attitudes, work ethic and characteristics, therefore requiring a leadership model which is able to address the integration of millennials and the fourth industrial revolution:

‘As a leader, you should be able to understand each employee individually and develop an integration plan that will unleash their potential. You don’t judge, suppress or change them but develop them within their own thinking, characters and innovation and there will be no challenges in leading them.’ (R13.)

‘We have to capacitate our baby boomer leadership to be able to, uhm, to deal with the strong characters that are coming across as a result of this generation of millennials that we have employed.’ (R5.)

‘So, the internal environment, the internal culture, the internal style is highly buffeted by, uhm, party politics, it is highly buffeted by personal ambitions and personal aspirations and it is highly buffeted by, uhm, I think significant trust deficit. Leaders need development to lead a group such as millennials who are a different generation compared to us.’ (R9.)

‘What we as managers at our level where we hold leadership positions and we are not in that category, we should be alive to the things that make millennials comfortable, we should be a little bit more patient but most importantly is to use that grouping to get more value, extract value from them as opposed to getting them conform to your standards and principles.’ (R14.)

The millennials corroborated the view that leaders need direction on how to lead millennials to ensure that there is a transfer of skills and proper succession planning:

‘The older people have the advantage of experience. We need the old as well as the young generation in order to have a good production, but the only difference for me that I can say is the experience to lead and manage millennials as well as education or skills to be transferred so that the younger generation are empowered.’ (FG5.)

‘The older generation may have a greater understanding of how and why certain things are done in that way they can help the millennials develop and allow themselves to see positive things about millennials. I think leaders find it difficult to manage millennials and maybe this topic is not researched or it can be a disadvantage because there might be a loophole in the organisation.’ (FG6.)

6.10. Theme 8: Need for Change in Mindset

The leaders expressed the view that they and the organisation will have to adapt to the integrate millennials and the fourth industrial revolution, hence the need for change management. The leaders acknowledged that the fourth industrial revolution and the emergence of millennials in their numbers in the workplace had caught them off guard. However, they recognised that there was a need to take action to rectify this and to create a working environment inclusive of the younger generation. There was also an acknowledgment by the leaders that they had been working within an old system and structure which had become routine for them, and that the transition into a world aligned to the rest of the business world would require psychological changes. Whatever the challenges, the majority of the leaders shared the view that the organisation had to transition from its current state to a future state which included millennials and the fourth industrial revolution. It was evident that the leaders themselves will be required to undergo a change management process to enable them to understand the millennials as a generation and their expectations, and to adopt a culture which will integrate millennials and the fourth industrial revolution into the workplace:

‘It is not the matter of preparing, I think, it is the matter of acknowledging that millennials are there, we have to, it is an ongoing process. There are some things that caught us off guard, and we woke up and already there is so many youth and you have to start moving with the flow, so constant change management programmes and uhm, there are certain things that need to change and happen within the organisation. I think it is an exciting time and we are really enjoying it and in some instances there are challenges but we will soldier on.’ (R15.)

‘The organisation needs to be ready, they need to involve people who are young with fresh ideas but however, leaders need to regard all the people as important and they need to put systems in place to make work better for the youth and to implement new systems.’ (FG4.)

‘In terms of technology there is also a difference because you find that a person that is old, in terms of training as well as education background, you find that the way that they were doing and learning before besides that new people, they haven’t changed.’ (FG1.)

‘Millennials are more likely to accept change as it comes along, especially when it comes to technology and new systems that will make their work light and that will provide stability and that will have greater value outcome but that is also to say the managers need to go through the change management process.’ (FG2.)

6.11. Theme 9: Leaders’ Perceptions of Millennials

It was imperative for the researcher to obtain from the leaders their experience leading millennials. The aim was to gauge their perceptions to ascertain whether millennials are misunderstood by the older generation. It was important to get a better understanding from the leaders’ perspectives of the behaviour of the millennials in the workplace. The leaders revealed in their responses various advantages and disadvantages of working with millennials and how they have experienced their presence in the Ethekwini Municipality. The responses elicited that the leaders believed that millennials were innovative in their ability to generate new ideas, that they appreciated open communication and transparency, and that they had the ability to use technology to solve problems in the operations of the organisation. It was evident from some of the responses that millennials thrived in an innovative and open working environment. The leaders acknowledged, however, that millennials in the Ethekwini Municipality have not been given a platform to showcase their skills, especially technological skills, which have proved to be one of the strengths which the older generation does not have:

‘And the youngsters!!! They want everybody to be successful, they like to share, they love each other, I find there is less competition amongst the millennials, it is just the way they are which is refreshing, which we do not really understand because you have got to be the best, you have got to shine, they do not moan, they do not shine, they are busy with their devises and they are in their own little social groups, they are doing this and they are designing an app over there, so what if somebody gets an award for that, that it is, it is all different mind-set altogether.’ (R2.)

‘I find it very interesting to work with them and even having like, general conversations with them, they make you see things in a different perspective. Uhm, the other thing that I like about them is the

pace they work in, it is unlike us the baby boomers, for them if they want to do something, it must be done today not tomorrow.’ (R8.)

‘In our unit, we are able to embrace those ideas from the millennials, for an example when it comes to technology and online learning, millennials are spear heading the platform, because they are young they know, they are innovative and so on. So, we have said, now, when it comes to technology let us listen to them, and they are coming up with good ideas.’ (R7.)

‘Millennials could easily call themselves experts or influencers when it comes to technology and social media or whatever they call themselves. But they are quite innovative people in terms of how they think around problems. They’re more problem solving compared to us who sort of dance around a problem trying, you know, to find various modalities into a solution. When they find a solution, they go with it. They don’t really have the time to waste.’ (R1.)

The leaders also noted the challenges that they have experienced supervising millennials which stemmed from the millennials’ expectation that they were joining an organisation that already had embedded technology and was forward thinking in its business approach. Moreover, they observed that millennials were vocal about the type of working environment they expected, and this was not what the municipality was currently offering. This frustrated millennials, who as a result became impatient and felt entitled to advance quicker in their careers although they lacked the experience necessary to manage. This in turn led to millennials becoming demotivated and despondent, and to some of them losing interest and leaving the organisation. Another frustration expressed by millennials was that the municipality continued to advertise vacancies for jobs with requirements that millennials did not have.

‘The millennials have very strong characters and personalities, and you find that, uuhm, in many instances it is misconstrued as disrespect but in actual fact a person is just expressing themselves. So, there is that lack of balance between the leaders and the younger generation.’ (R5.)

6.12. Theme 10: Development Programmes to Nurture Millennials

It appeared from the interviews that the leaders recognise that the Ethekwini Municipality has not done enough to develop millennials in the workplace. Some of the leaders shared a common view that the municipality has not invested in the development of millennials even though it has departments whose primary role is to do so. The leaders recognised that millennials have the potential to make an impactful and valuable contribution to the Ethekwini Municipality and made reference to how the talent of the millennials can be nurtured through talent management. Hence, some leaders mentioned specific programmes that the municipality can use to further develop and accelerate the

millennials to fast track their career advancement within the organisation. Their views seemed to suggest that millennials are different and their training and development in the workplace should be unique and must include technology due to their ability to adapt easily:

‘I think if the city can employ more of millennials not as graduates but as permanent people and maybe put them through the accelerating development programmes so that they can assume positions of power where we could see changes in implementing some of the ideas that we have.’ (R8.)

‘So what the difference is that are produced by that, is that the older generation seems to be kind of allowing things to remain the way that they are as opposed to the new generation which has adapted to ever changing environment and is always inquisitive and trying to change things in a working environment. So, the two can still co-exist. I don’t think, I don’t think fundamentally they are different they just exist under different conditions which each can learn to adapt and to be able to move on from which requires talent and development programmes.’ (FG5.)

6.13. Theme 11: Insufficient Technological Transformation

It was apparent that the leaders recognised that the organisation does have any opportunities to expose the millennials to the fourth industrial revolution even though they acknowledge that millennials are driven by technology. As mentioned above, the municipality is highly influenced by politics and the need to deliver services to communities; therefore, it has not had the opportunity to introduce any programmes that promote the use of technology in the workplace. As none of the leaders mentioned programmes that have been implemented, the inference can be drawn that the organisation has not put in place any such programmes. Some of the leaders admitted that the Ethekwini Municipality has not given staff and particularly millennials resources to make use of the opportunities presented by the fourth industrial revolution. The millennials who participated in the focus group shared a common view that millennials have a strong relationship with the fourth industrial revolution; however, the organisation has not invested in optimising the opportunities presented by the fourth industrial revolution. Some of the leaders shared examples of how the municipality could utilise technology to enhance the organisation. The leaders recognised that millennials are influenced by technology and if given the opportunity they can utilise the fourth industrial revolution effectively in the workplace:

‘In my view, they are not given necessary opportunities, as such, one cannot determine whether indeed they are influenced by fourth IR in the municipality. But generally, I would say yes they are influenced by fourth IR. In fact, as I have said, you cannot separate fourth IR from millennials. They are technological savvy and they are always either on the phone, computers or exploring internet and social media. As we talk of robotics and artificial intelligence, you may find that millennials have

a better understanding of the impact thereof than older generation. They are therefore heavily influenced by the fourth IR in general.’ (R13.)

‘I think they are the fourth industrial revolution because they are bringing it, they bringing through them. You may speak to anyone, they’ve got a smart phone that they holding all the time. They easily, how can I say, recognised as the solution for the challenge itself because they are coming in with a whole new perspective. So the fourth IR is in your youth, in your millennials.’ (R6.)

‘Specifically, our organisation, millennials try and apply the use of technology in terms of internet and electronic processes, the municipality, I would like to think, that it can improve to make sure that the use of technology is at an optimal level.’ (FG2.)

6.14. Theme 12: Futuristic Viewpoint of the Fourth Industrial Revolution

During the interview, it was clear that the leaders are aware of the fourth industrial revolution but have not been exposed to it within the organisation because most of the work is still done manually and in those areas where technology is used it is not at an advanced level. Hence, the responses received were in relation to the benefits and the impact the revolution will have on the organisation in the future. The leaders of the municipality acknowledged that the fourth industrial revolution will have a significant impact within the organisation; however, the organisation is not in a state of readiness to embrace the opportunities the revolution will bring to the organisation. The responses received from the interviews and the focus group were similar, as they agreed that the organisation had the potential to improve its operations and service delivery through the use of technology. Some participants shared their opinions on how the Ethekewini Municipality could use technology to enhance their systems and work smarter:

‘So, it is technology that is already there. So, I will give an example, and this is where the fourth industrial revolution and its capabilities need to be understood a little bit more. So, we had a fire drill the other day and somebody is taking a piece of paper is trying to work out who is here and who is not here, right, I said “we all scanned in we will scanned out”. So the system could tell at any one point in time we had X number of people are in the building on this floor, and so forth and so on, provided people use their devices properly.’ (R14.)

‘I think there’s unlimited opportunities. In terms of delivering services, fourth IR can help big time in interactions with your stake holders, the public, just the basic communication, the way you deal with the issues.’ (R4.)

‘Durban should have had an app a long time ago. You should be able to go to your app and it should tell you about the list of events. If there is going to be floods, warnings should come straight and not

be copied and pasted on Whatsapp, like it is now, it should be popping up in your hand. That's how technology should help the city become more efficient.' (R1.)

'Things that would be needed or processes that would have to be done online and initially, without even having to do it manually, you still see that even clusters, like Corporate and Human Resources where we have, almost 90% of the staff would have access to the appropriate tools or technologies, or the internet, whatever it might be. They even don't use the systems to the optimal level.' (FG6.)

'So for me I would say the municipality as an organisation, has started and is prepared and has done the necessary assessment to implement how a portion of the fourth industrial revolution within the IT space but adoption and mindsets are one of the blockers for such implementation within the organisation.' (FG4.)

Some participants in the focus group shared the view that top management is hindering the progress of integrating the fourth industrial revolution into the organisation:

'Yes, Carol. We are not ready. Number one, I think my answer would be even more like what Kwenzo was saying. I think number one, it is a mindset, Carol. Especially from our top management because that is where things can be done. You will find that we want the same things but because of our top management, the willingness is not there.' (FG2.)

'The municipality is not ready, for a person to get a laptop, a simple laptop, it is a process and a half, so we are not even halfway there yet. So, we have not even approached the fourth industrial revolution.' (FG4.)

6.14.1. Sub-theme 12.1: Embracing the Fourth Industrial Revolution for Strategy

Implementation

Ethekwini Municipality is working towards building a smart city as one of its long-term strategic goals, and is determining how the fourth industrial revolution will have an impact on achieving this goal. It appeared during the interviews, however, that some of the leaders were not aware that the organisation had started generating ideas on how the fourth industrial revolution can enhance the strategy of the municipality. As mentioned above, the leaders suggested that the fourth industrial revolution was merely a buzz word for everyone, including top management, and that there was in fact no clearly articulated plan for integrating the revolution into the workplace. It was evident that some of the leaders were not aware of the organisation's long-term plan to build a smart city. Some agreed that the revolution would assist the organisation to achieve its long-term strategic goals, but there was no indication of a common understanding how the revolution would be integrated into the workplace. There was a shared view that the fourth industrial revolution will certainly have an impact on the long-term strategic goals of the

Ethekwini Municipality and some of the leaders gave examples of how the fourth industrial revolution could do so:

‘Absolutely I agree 100%, 100%, ja, because there is no option now, I mean you have to embrace it, ja. We passed the first industrial revolution, the second, the third, we now in the fourth and remember it’s a revolution and in any revolution there must be change, ja.’ (R6.)

‘I think there’s unlimited opportunities. In terms of delivering services, fourth IR can help big time in interactions with your stake holders, the public, just the basic communication, the way you deal with the issues. A lot of it is just communication actually. Understanding their needs and communicating what you are doing, knowing things before they happen. Proactively dealing with the communities. I think the fourth IR can deal with a lot of our problems.’ (R4.)

‘It would, definitely. You know a simple thing like, uhm, even if you go to other companies as you enter, you will find screens talking about the organisation, what is happening in the organisation. For us the beginning of the year. The city will be doing road shows about the budget and everything, if we could have screens in all our customer services centres, Sizakala Centres where people can get to read about these things rather than going to Imbizo as such.’ (R6.)

‘Definitely, uhm, like I was talking about the digital strategy of the city, many cities now are moving towards being smart cities. A smart city, simplified, is a city that is advanced in technology, that’s a smart city. Giving you examples, for an example, you have a traffic light a robot that is not functioning then if you have advanced technology you are able to repair or even make it function just at the touch of a button at home or in the office, you don’t have to go out there and repair it physically.’ (R7.)

6.15. Theme 13: Automation and Potential Loss of Jobs

A majority of the leaders were consistent in their response that the Ethekwini Municipality was not ready to integrate the fourth industrial revolution. Hence, the leaders themselves were not able to articulate any opportunities or challenges they may face with integrating the fourth industrial revolution into the workplace. They gave the impression that they could not speak of their experience on a subject that they have not dealt with; however, they could share their views on the future and how the fourth industrial may lead to redundancy for some employees. The shared sentiment was that the fourth industrial revolution would bring with it disruption in the workplace, which may be one of the reasons why the leaders have not prioritised the revolution. Some of the leaders were of the view that the integration of the fourth industrial revolution would lead to the reassessment of jobs which would create havoc in the municipality.

The leaders highlighted that the municipality is a highly unionised environment, and that the unions' perception of the fourth industrial revolution is that it will lead to job losses. It was therefore apparent that neither the leaders nor the millennials who participated in the focus group were able to engage extensively on the opportunities and threats that the fourth industrial revolution will have on the Ethekwini Municipality because it has not embraced and integrated the fourth industrial revolution into the workplace:

'I do not think we are ready. I do not think we are ready. Because we still need to work internally in terms of understanding the fourth IR and the benefits of fourth IR and what it means to employees.' (R8.)

'In a nutshell, the fourth IR brings about disruption in the world of work as it demands that we move with speed towards doing things differently and in a more technological way. While this is good, it may pose challenge especially from human capital point of view as some of the things done by humans which means that jobs will become redundant.' (R13.)

'Our workspace in the city hasn't really grasped the realities of four IR. We speak about it a lot, get excited about it a lot, we good in lobbying and advocating but in terms of implementing and making the change I think this is where the government is seriously lacking.' (R11.)

6.16. Theme 14: Ineffective Attraction and Retention of Millennials in the Municipality

Some of the leaders were of the view that the municipality cannot offer the same working environment as the private sector. Most of the jobs that the municipality creates are indistinguishable from existing posts, whereas in the private sector jobs are created and streamlined to meet a specific business need. The municipality will incur high costs to integrate technology into the workplace based on the number of employees and the resources required since the municipality operates on a specific budget which is approved by the council and poses a challenge to amend or adjust to include the costs of integrating the fourth industrial revolution. The view was that the private sector has the resources to upgrade their systems and align to the latest technological advancements since their businesses are driven by profits. The leaders shared the common view that the organisation does not offer a working environment that will attract and retain millennials since the Ethekwini Municipality operates in the public sector – an environment that does not offer millennials the opportunity to thrive as they can in the private sector. As a result, the millennials are leaving the municipality to join the private sector to broaden their experience in a working environment that is technologically driven and offers career growth:

'I believe millennials are frustrated as the environment is not conducive for them. Consequently, they would want to join organisations that are more technological savvy and aligned to what they believe in. With the investment in technology and leadership that is receptive of them and aligned to technological innovations, certainly the municipality will attract and retain them.' (R13.)

'I think our work is not looked as attractive as the private sector.' (R10.)

'Right, uhm, what would attract millennials to the environment like this? That actually could be very difficult, because what are the needs for millennials? Right, ... space, techno savvy and how do you?' (R3.)

The millennials who participated in the focus group had different views on the use of the fourth industrial revolution to attract and retain millennials in the organisation. A participant in the focus group shared the same view as the leaders that the organisation has not shifted towards the utilisation of the fourth industrial revolution to attract and retain millennials:

'I won't say exactly, but I say it still effects but we, say there is a leader who says the municipality is ready but it is just the mindset. But I would say it is possible with our organisation.' (FG1.)

'Yes, I think that the municipality is utilising the fourth industrial revolution to attract and retain. I just want to touch specifically on the recruitment process.' (FG2.)

'In terms of the retention part of it, I think that is where the struggle is at the moment. We are attracting them, but we fail to keep them.' (FG4.)

6.17. Theme 15: No Commitment to Integrate the Fourth Industrial Revolution

One of the objectives of the study was to determine the readiness to integrate millennials and the fourth industrial revolution into the Ethekewini Municipality. The views shared by the leaders and the millennials varied based on their experiences relating to the readiness of the Ethekewini Municipality to integrate. The majority of the responses suggested that it is not ready. As mentioned above, it appeared that millennials and the fourth industrial revolution are not a priority within the municipality. This is evident in the municipality's five-year plan (IDP) which does not provide a clear direction on millennials and the fourth industrial revolution. Some of the responses received made reference to the barriers that hinder the integration of the fourth industrial revolution within the municipality, such as infrastructure, equipment and the psychology of the leaders in the municipality. Some leaders said that there are initiatives in the pipeline but that the implementation of those initiatives is inadequate:

‘No, the municipality is not ready. It’s all about planning and be open to the changes happening around the world particularly in the workplace.’ (R13.)

‘Uhm, we are rolling out for an example the optic fibre and you might have heard that, uhm, even our buses, uhm, some of the ... all of the libraries, museums, Sizakala Centres, they have free wifi, so, that is the fourth industrial revolution, that is technology, so, it may not be at the speed that people would want to see but the concept as such is embraced, we even have what we call a digital strategy as the city, which is looking at how can we become a smart city. So, the concept is there ... the ground is levelled to enable the implementation of the fourth industrial revolution.’ (R7.)

‘Yes, well that would be my first point to say that the infrastructure itself, the equipment is not at the level of not even the third industrial revolution ... but second to that, that is just in terms of the equipment and the infrastructure, psychologically, the municipality is not prepared, is not ready, in terms of the leadership.’ (FG5.)

6.18. Theme 16: Promotion of Mixed Leadership Style

The leaders shared the view that they do not subscribe to a specific and universal leadership style because of the size of the organisation. Leaders are scattered and placed in various geographic areas, and this has an impact on their involvement in the activities of the municipality. The view expressed by the majority of the leaders is that the municipality has leaders who rely on different leadership styles which are dependent on their particular attitudes. The leaders were probed further to give their views on the type of leadership style required by the organisation to integrate millennials and the fourth industrial revolution. It emerged that they shared the common view that the municipality requires a mixed leadership approach. The leaders said that they had been exposed to different leadership styles in the organisation and these were used interchangeably based on an individual leader’s personal leadership style and the tasks they needed to deliver. Some of the leaders suggested the retention of leadership styles that they had been exposed to which had worked, and others made recommendations on the types of leadership that could be adopted by the municipality to integrate millennials and the fourth industrial revolution. However, the common view was that it may not be possible for the organisation to have one leadership style:

‘We mix our leadership approach because when you come in as a leader you are not really introduced to a particular culture of leadership. There is no particular culture of leadership that exists, that everyone has to follow through with.’ (R1.)

‘We need visionary leaders who are open to fresh ideas and are transformational in their approach.’ (R13.)

‘Uhm, to be honest, the municipality doesn’t have one approach or style of leadership that has elevated to become “the leadership style of the city”. But, also while from our point of view we develop leaders to be able to apply their leadership abilities, we do not necessarily emphasise on one style of leadership because, I think theory has proven that it is very difficult to apply just one style. You need to combine either two or three even four types of leadership style, uhm, depending on the situation as I alluded to.’ (R7.)

‘I will still go with democratic type of style, uhm, which will obviously allow different views to come into the picture. But also you just need to implement widely other leadership styles and be able to put that balance in place.’ (R15.)

‘It’s a mix I would say you know there is different management styles existing across the institution.’ (R6.)

‘Ethical leadership, and you will find some political leadership, yah, you will find transformational leadership, so it is a variety of leadership styles that you get.’ (R8.)

6.19. Theme 17: Covid-19 and the Advancement of Technology

The millennials who participated in the focus group shared the view that the organisation was not prepared from a technological point of view for the disruption of work caused by the Covid-19 pandemic. When the national lockdown was declared the organisation was confronted with the problem that employees, who still performed their work manually, were prevented from coming to work, and this led to a loss of income. Moreover, the leaders were instantaneously put under pressure to deal with the demand to utilise technology for business continuity, to streamline process and to provide employees with tools to work remotely. The national lockdown made the leaders realise that the organisation had failed to take advantage of the opportunities presented by the fourth industrial revolution. The responses revealed that the top management of the organisation needed to reassess the future of work and develop a culture that optimised the use of technology. The millennials appreciated that the Covid-19 pandemic compelled the organisation to introduce technological advances as well as remote working and flexibility, which increased performance and productivity:

‘I think that prior to the lockdown, no we were not but I think the lockdown has really helped in accelerating readiness and willingness.’ (FG1.)

‘You know we’ve had tools to work remotely, we’ve had Microsoft 365 installed on our computers, the past few months but I got to play around with it, me personally, starting from the lockdown and I must say the older generation has a challenge to work with this technology but us who are younger, you know I can connect and attend a meeting on Microsoft Teams.’ (FG2.)

‘In terms of retaining, it is hard to say from a non-HR point of view, but we’ve seen the joy that comes with the flexibility of being able to work remotely and the amount of increased performance that we have seen within some of the sections in the Information Management Department from working remotely. So that is one of the things that the younger, or millennials, that we had recruited, were experiencing at organisations outside of the municipality, now that we have it internally, we’re seeing positive feedback from those individuals and those who are within the departments as well.’ (FG3.)

‘In the municipality you see how Covid-19 has forced the organisation to have us move quicker into that direction. Now what you need to do again now is that every department has its own internet systems that can embrace the fourth industrial revolution as well as now the internet clients, in terms of the systems.’ (FG4.)

6.20. Detailed Analysis of Demographic Information: Questionnaire

The analysis of the demographic information gathered from the questionnaire is presented below to demonstrate that the individuals who completed the questionnaire are millennials based on their age. It was important to indicate the gender, experience, occupational level and qualifications of the participants to make sure that the millennials fully understood the questions. The graphs displayed below gives a graphical analysis and percentage breakdown of the demographic information based on the actual number of millennials who participated in the questionnaire.

6.20.1. Demographic Information: Questionnaire

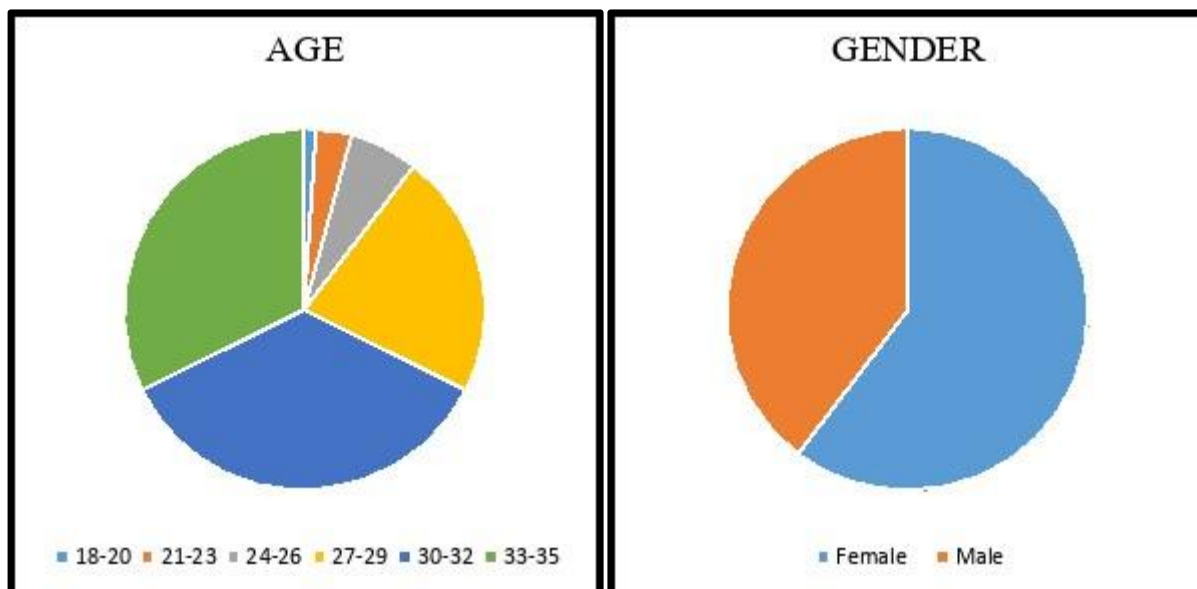


Figure 6.1: Age and Gender

The figure above represents the age and gender of the participants which was imperative since the study was targeting individuals in a specific age group (18-35 years). The age group of the participants

were analysed as follows: 18-20: 1.0%; 21-23: 3.1%; 24-26: 6.3%; 27-29: 21.9%; 30-32: 35.4%; 33-35: 31.3%. Only one of the participant's age was unspecified (1.0%). The figure indicates that 60.4% of millennial were female and 38.5 % were male.

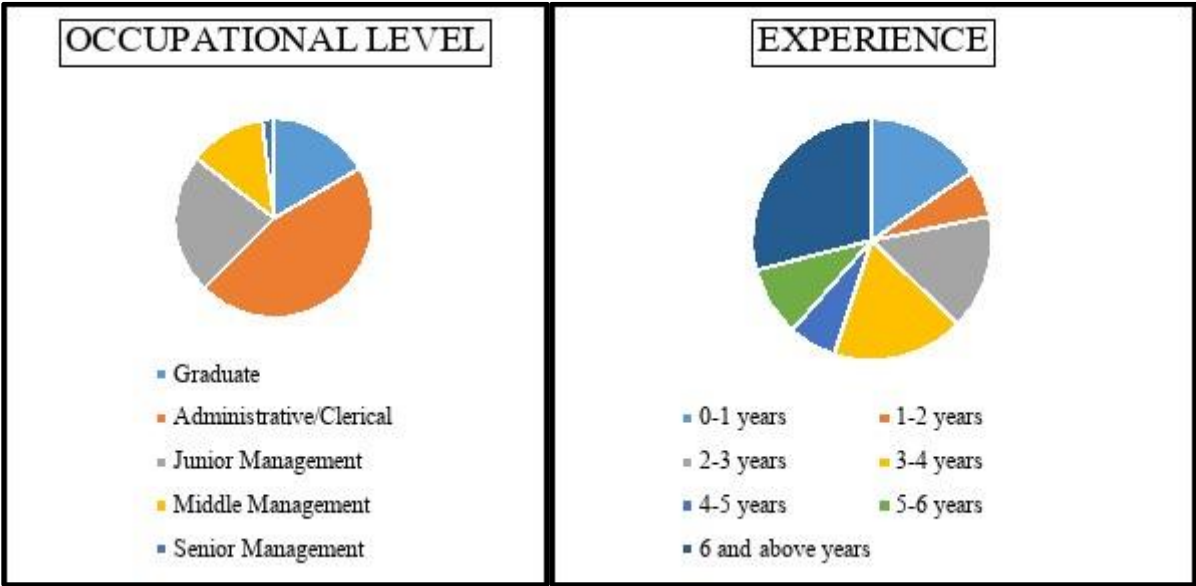


Figure 6.2: Occupational Level and Experience

Figure 6.2 represents the occupational level and experience of the participants which was important for the study to ensure that there was a combination of experience at various occupational levels. The occupational level of the participants was analysed as follows: Graduate: 16.7%; Admin and clerical: 45.8%; Junior management: 22.9%; Middle management: 12.5%; Senior management: 2.1%; and 0-1 years: 15.6 %. The level of experience was: 1-2 years: 6.3%; 2-3 years: 15.6%; 3-4 years: 17.7%; 4-5 years: 6.3%; 5-6 years: 9.4%; 6 years and above: 29.2%.

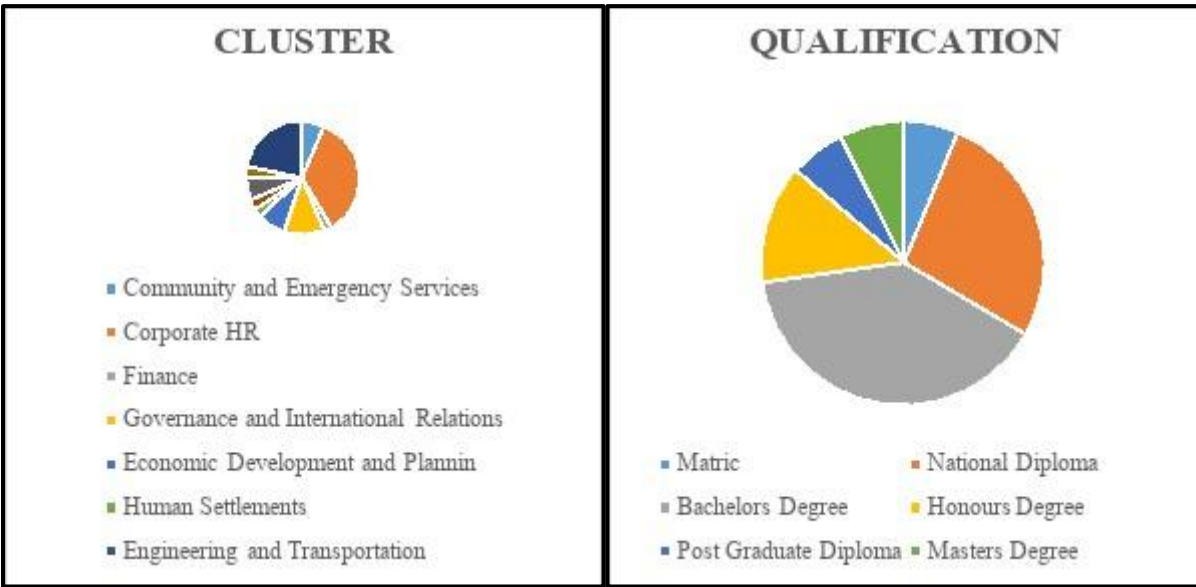


Figure 6.3: Cluster and Qualification

Figure 6.3 presents that cluster which the participants belong to and their qualifications. All the participants were asked to share their qualifications to ensure that they were literate and able to answer the questions. It was important to gauge which clusters the employees belonged to in order to analyse the responses received and compare the responses across the clusters to understand which clusters may require interventions. Figure 6.3 shows that the majority, 39.6% of millennials that participated in the questionnaire, had a bachelor's degree and the minority, 6.3%, had a matric and post graduate diplomas. The majority, 35.4%, was in the Corporate HR cluster and the minority, 2.1%, was in the Finance and Human Settlements cluster. The cluster and qualifications of the participants were analysed as follows:

6.21. Data Analysis and Presentation of the Quantitative Data

The data collected was presented, coded and analysed using SPSS. A reliability test was applied to test the data, and descriptive statistics was used, including means and standard deviations. Where applicable the frequencies are represented in tables or graphs. A Chi-square goodness-of-fit-test was used; a univariate test was used on a categorical variable to test whether any of the response options was selected significantly more/less often than others. Under the null hypothesis, it was assumed that all responses were equally selected. A Wilcoxon Signed Ranks test, anon-parametric test, was used to test whether the average value was significantly different from a value of 3 (the central score). This was applied to Likert scale questions. It was also used in the comparison of the distributions of two variables. An ANOVA test was used to compare two or more groups of cases in one variable. A binomial test was used to test whether a significant proportion of respondents select one of a possible two responses. This was extended to data with more than two response options, which were split into two distinct groups. Spearman's correlations were used to measure how ordinal variables or rank orders were related. The one-sample t-test was used to determine whether a mean score was significantly different from a scalar value. Independent samples t-tests were used to compare two independent groups of cases. A paired samples t-test was used to compare the means of two variables for a single group. Factor analysis was used to explore the structure of data and extract factors. A five-point Likert scale was used to investigate the statements posed to the participants.

All questions with a five-point Likert agreement scale were analysed for significant agreement or significant disagreement using the one-sample t-test. The average agreement score was tested against the central score of '3'. The chi-square goodness-of-fit test was used on all questions with more than two categorical responses to determine if any of the response options were selected significantly more than others.

6.21.1. Understanding of the Fourth Industrial Revolution

A statement was put to the millennials to probe their understanding of the fourth industrial revolution using a five-point Likert scale, from 1 = strongly disagree to 5 = strongly agree. The results of analysis (Table 6.2) show that there is significant agreement that the fourth industrial revolution is fairly well understood.

Table 6.2: Analysis Summary: Understanding of the Fourth Industrial revolution

| I have a fair understanding of the 4th industrial revolution | | | | | | | | | |
|---------------------------------------------------------------------|----------|-----------|-----------|----------------|----|--------------|-------|----|---------|
| Responses as Frequency (%) | | | | | n | Mean (SD) | t # | df | p-value |
| Strongly disagree | Disagree | Neutral | Agree | Strongly agree | | | | | |
| 2 (2.1) | 6 (6.3) | 21 (21.9) | 54 (56.3) | 13 (13.5) | 96 | 3.73 (0.852) | 8.386 | 95 | <.001* |

* indicates significant at the 95% level

test statistic for a one-sample t-test

6.21.2. Frequency of the Use of the Internet for Information

The respondents were asked to indicate their usage of the internet for information on a scale of 1 = never to 5 = always. The results of analysis (Table 6.3) show that a significant number of the participants indicated that they utilise the internet ‘often’ or ‘always’ for information.

Table 6.3: Analysis Summary: Using the Internet for Information

| How often do you use the internet for information? | | | | | | | |
|-----------------------------------------------------------|--------------|-----------|-----------|-----------|------------------|----|---------|
| Responses as Frequency (%) | | | | | χ ² # | df | p-value |
| Never | Occasionally | Sometimes | Often | Always | | | |
| 1 (1.0) | 4 (4.2) | 7 (7.3) | 29 (30.2) | 95 (56.3) | 106.211 | 4 | <.001* |

* indicates significance at the 95% level

test statistic for the chi-square goodness-of-fit test

6.21.3. Utilisation of the Fourth Industrial Revolution

When investigating the views of the participants regarding their utilisation and preferences of the fourth industrial revolution in the workplace, a significant majority (95.8%) indicated that they use the internet for information in the workplace; a significant majority (70.8%) prefer using computers rather than cell phones to gather information at work; and significant proportions use the internet at work for research (44.8%) and/or electronic emails (27.1%) (Table 6.3 and Figure 6.4).

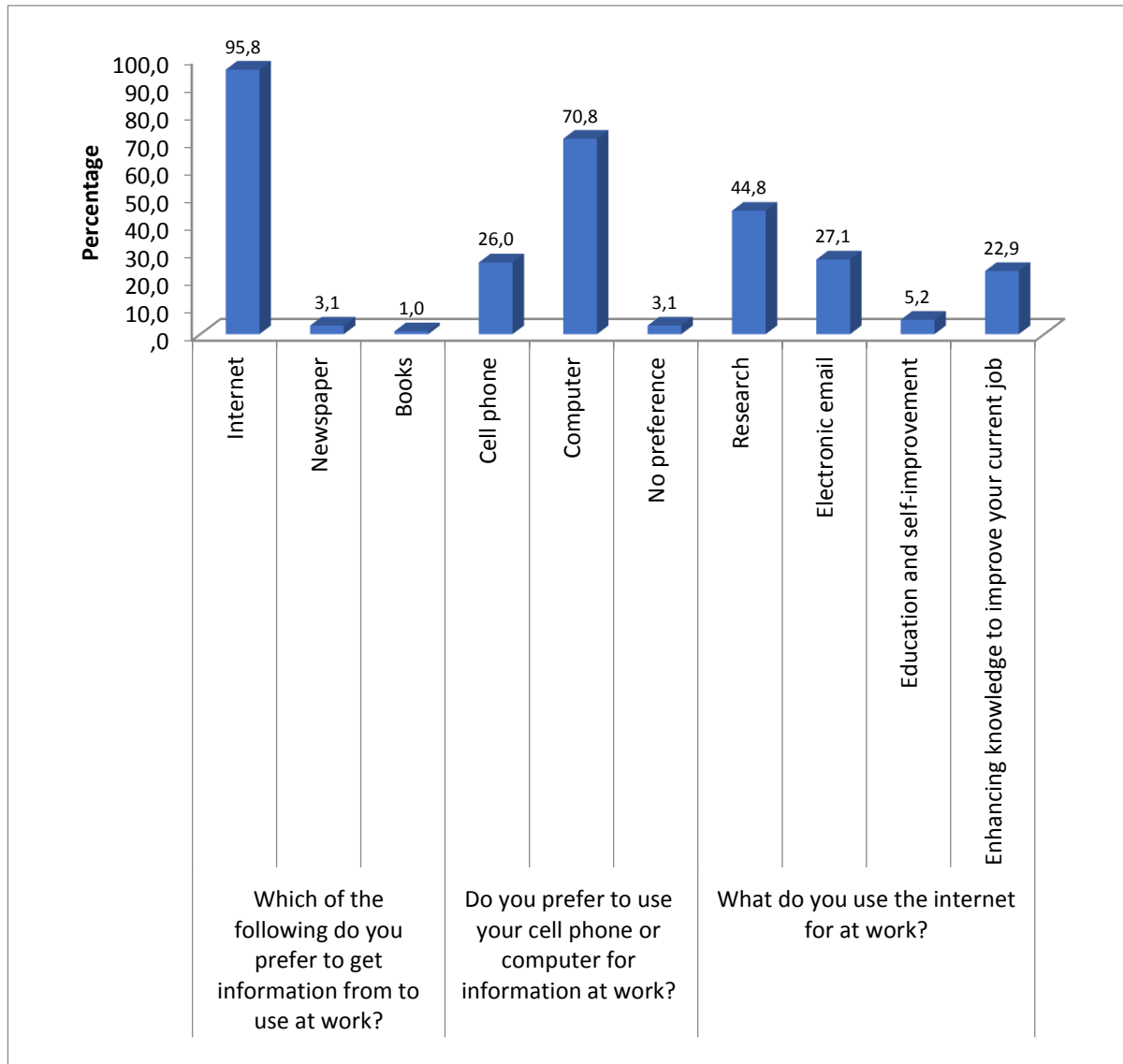


Figure 6.4: Utilisation of the Fourth Industrial Revolution

Table 6.4: Utilisation of the Fourth Industrial Revolution

| | Responses | | Chi-square goodness-of-fit results | | |
|-------------------------------------------------------------------------------------|-----------|------|------------------------------------|----|---------|
| | Frequency | % | X ² # | df | p-value |
| Which of the following do you prefer to get information from to use at work? | | | | | |
| Internet | 92 | 95.8 | 168.813 | 2 | <.001* |
| Newspaper | 3 | 3.1 | | | |
| Books | 1 | 1 | | | |
| Which of the following do you prefer to get information from to use at work? | | | | | |
| Cell phone | 25 | 26 | 68.313 | 2 | <.001* |
| Computer | 68 | 70.8 | | | |
| No preference | 3 | 3.1 | | | |
| What do you use the internet for at work? | | | | | |
| Research | 43 | 44.8 | 31.417 | 3 | <.001* |
| Electronic email | 26 | 27.1 | | | |
| Education and self-improvement | 5 | 5.2 | | | |
| Enhancing knowledge to improve your current job | 22 | 22.9 | | | |

* indicates significance at the 95% level

test statistic for the chi-square goodness-of-fit test

6.21.4. Impact and Usage of Technology in the Organisation

Three questions, measured with the five-point Likert agreement scale, were asked to gauge the usage and impact that technology may have on the municipality. The results (Table 6.4) show that there is significant agreement that: technology is important to make processes more efficient within the municipality; the municipality uses technology to enhance its strategic objectives; and most projects are implemented using efficient computer software.

Table 6.5: Impact and Usage of Technology in the Municipality

| Responses as Frequency (%) | | | | | n | Mean (SD) | t # | df | p-value |
|--------------------------------------------------------------------------------------------|--------------|--------------|--------------|-------------------|----|-----------------|--------|----|---------|
| Strongly disagree | Disagree | Neutral | Agree | Strongly agree | | | | | |
| Technology is important in my organisation to make processes more efficient | | | | | | | | | |
| 4 (4.2) | 1 (1.0) | - | 21 (21.9) | 70 (72.9) | 96 | 4.58 (0.902) | 17.194 | 95 | <.001* |
| The Ethekwini municipality uses technology to enhance their strategic objectives | | | | | | | | | |
| 4 (4.2) | 11 (11.5) | 23 (24.0) | 39 (40.6) | 19 (19.8) | 96 | 3.60 (1.061) | 5.579 | 95 | <.001* |
| Most projects in the municipality are implemented using efficient computer software | | | | | | | | | |
| 9 (9.4) | 15 (15.6) | 24 (25.0) | 40 (41.7) | 8 (8.3) | 96 | 3.24 (1.112) | 2.111 | 95 | .037 |

6.21.5. Aspects of the Working Environment

Millennials were asked to rate their level of agreement, using the five point Likert scale as before, to 35 questions about different aspects relating to their work. Results of the analysis to determine if there is significant agreement or disagreement to these items are summarised in Table 6.6.

Table 6.6: Aspects of the Working Environment

| Construct | n | Mean (SD) | t # | df | p-value |
|-----------------------------------------------------|----|-----------------|--------|----|---------|
| I understand the definition of a millennial | 96 | 4.03 (0.989) | 10.217 | 95 | <.001* |
| Millennials are different from the older generation | 95 | 4.35 (0.92) | 14.277 | 94 | <.001* |
| In my organisation leaders understand millennials | 95 | 2.99 (1.067) | -0.096 | 94 | 0.924 |

| | | | | | |
|-----------------------------------------------------------------------------------------|----|-----------------|--------|----|--------|
| Leaders in my organisation are skilled to lead millennials | 96 | 3.14 (1.012) | 1.311 | 95 | 0.193 |
| I am provided with opportunities for self-development | 91 | 3.6 (1.01) | 5.71 | 90 | <.001* |
| I am recognised and rewarded for good performance | 96 | 3.44 (1.014) | 4.229 | 95 | <.001* |
| I am given the opportunity to challenge the status quo and present new innovative ideas | 93 | 3.15 (0.999) | 1.453 | 92 | 0.15 |
| I am encouraged to implement technological innovations in my department | 96 | 3.03 (1.02) | 0.3 | 95 | 0.765 |
| My work preferences are taken into consideration | 96 | 3.18 (1.046) | 1.658 | 95 | 0.101 |
| My work environment is flexible | 95 | 3.38 (1.169) | 3.161 | 94 | 0.002* |
| I am supported by my manager to carry out my tasks | 95 | 4 (0.923) | 10.565 | 94 | <.001* |
| I feel that there is a good work life balance in my organisation | 95 | 3.4 (1.143) | 3.411 | 94 | 0.001* |
| I am given the opportunity to solve complex problems in my organisation | 92 | 3.53 (1.01) | 5.056 | 91 | <.001* |
| I prefer to use the internet to find information relevant to my job | 95 | 4.33 (0.659) | 19.602 | 94 | <.001* |
| I feel that my manager engages me at work | 96 | 3.26 (1.207) | 2.113 | 95 | 0.037* |
| There is open communication in my organisation | 95 | 3.55 (1.089) | 4.898 | 94 | <.001* |
| Information is shared open with everyone in the organisation | 96 | 3.38 (1.069) | 3.438 | 95 | 0.001* |
| My manager is approachable and relatable | 95 | 4.25 (0.743) | 16.425 | 94 | <.001* |
| I can relate to my managers leadership style | 94 | 3.88 (0.949) | 9.023 | 93 | <.001* |

| | | | | | |
|-------------------------------------------------------------------------|----|-----------------|--------|----|--------|
| My manager displays a strong set of values that are relatable | 95 | 3.57 (1.098) | 5.046 | 94 | <.001* |
| My organisation has a clear career path for my growth | 95 | 3.17 (1.191) | 1.378 | 94 | 0.171 |
| I am aware of the organisational culture in my organisation | 96 | 3.67 (0.777) | 8.408 | 95 | <.001* |
| My organisation is prepared to integrate millennials into the workplace | 96 | 3.38 (0.965) | 3.807 | 95 | <.001* |
| There are various strategies put in place to attract millennials | 95 | 3.16 (1.024) | 1.502 | 94 | 0.136 |
| There are various strategies put in place to retain millennials | 96 | 2.91 (1.027) | -0.895 | 95 | 0.373 |
| Technology has an impact on creating an innovative work environment | 96 | 4.09 (1.027) | 10.437 | 95 | <.001* |
| Technology is used to make processes more efficient | 96 | 4.11 (1.035) | 10.553 | 95 | <.001* |
| I feel that my manager trusts me to lead projects | 96 | 3.68 (0.9) | 7.369 | 95 | <.001* |
| There is consistency and fairness across the organisation | 95 | 2.84 (1.055) | -1.459 | 94 | 0.148 |
| The managers in my organisation display integrity all the time | 92 | 3.17 (0.956) | 1.744 | 91 | 0.084 |
| My manager provides me with guidance and support to achieve my goals | 93 | 3.62 (1.093) | 5.505 | 92 | <.001* |
| I am given constant feedback on my performance | 96 | 3.5 (0.962) | 5.09 | 95 | <.001* |
| My ideas are listened to and implemented | 96 | 3.27 (0.852) | 3.115 | 95 | 0.002* |
| My skills, experience and knowledge are fully utilised | 96 | 3.29 (1.065) | 2.682 | 95 | 0.009* |
| I work in an organisation that upholds ethics | 96 | 3.38 (0.987) | 3.724 | 95 | <.001* |

* indicates significant at the 95% level

test statistic for a one-sample t-test

Results show that there is significant agreement that: they understand the definition of a millennial; millennials are different from the older generation; they are provided with opportunities for self-development; they are recognised and rewarded for good performance; the municipality provides a flexible working environment; they are supported by their managers to carry out their tasks; there is a good work life balance in the Ethekewini Municipality; they are given opportunities to solve complex problems; they prefer to use the internet to find information relevant to their jobs; their managers engage them at work; there is open communication in the Ethekewini Municipality; information at the municipality is shared openly; managers are approachable and relatable; millennials can relate to their managers' leadership style; managers display a string set of values that are relatable; they are aware of the organisations culture; the organisation is ready to integrate millennials into the workplace; technology has an impact on creating an innovative work environment; technology is used to make processes more efficient; managers trust millennials to lead projects; managers provide guidance and support millennials to achieve their goals; they are given constant feedback on their performance; their ideas are listened to and implemented; their skills, experience and knowledge are utilised fully and they work for an organisation that upholds ethics.



Figure 6.5. Determining Groupings of the Items regarding the Workplace Environment

In order to determine groupings of these 35 items and hence the latent variables that represent the items, factor analysis with promax rotation was applied. Items 1, 2, 14, 28 and 32 were dropped because they did not load strongly enough onto any factor; while items 4, 20 and 34 were dropped because they cross-loaded onto multiple factors. Four factors were extracted which account for 59.66% of the variance in the data. A Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) of .850 and a significant Bartlett's test indicates that the data was adequate for successful and reliable extraction. Rotation converged in 6 iterations. The factor loadings are summarised in Table 6.6.

Table 6.7: Factor Loadings

| | Factor | | | |
|--------------------------------------------------------------------------------------------|--------|-------|------|------|
| | 1 | 2 | 3 | 4 |
| C24 There are various strategies put in place to attract millennials | .865 | | | |
| C23 My organisation is prepared to integrate millennials into the workplace | .845 | | | |
| C25 There are various strategies put in place to retain millennials | .808 | | | |
| C22 I am aware of the organisational culture in my organisation | .795 | | | |
| C21 My organisation has a clear career path for my growth | .651 | | | |
| C17 Information is shared open with everyone in the organisation | .599 | | | |
| C30 The managers in my organisation display integrity all the time | .589 | | | |
| C35 I work in an organisation that upholds ethics | .538 | | | |
| C29 There is consistency and fairness across the organisation | .531 | | | |
| C8 I am encouraged to implement technological innovations in my department | | 1.007 | | |
| C9 My work preferences are taken into consideration | | .928 | | |
| C7 I am given the opportunity to challenge the status quo and present new innovative ideas | | .918 | | |
| C10 My work environment is flexible | | .882 | | |
| C3 In my organisation leaders understand millennials | | .599 | | |
| C12 I feel that there is a good work life balance in my organisation | | .504 | | |
| C6 I am recognised and rewarded for good performance | | .483 | | |
| C18 My manager is approachable and relatable | | | .890 | |
| C19 I can relate to my managers leadership style | | | .719 | |
| C11 I am supported by my manager to carry out my tasks | | | .631 | |
| C31 My manager provides me with guidance and support to achieve my goals | | | .600 | |
| C16 There is open communication in my organisation | | | .546 | |
| C5 I am provided with opportunities for self-development | | | .536 | |
| C33 My ideas are listened to and implemented | | | .482 | |
| C13 I am given the opportunity to solve complex problems in my organisation | | | .480 | |
| C27 Technology is used to make processes more efficient | | | | .816 |
| C26 Technology has an impact on creating an innovative a working environment | | | | .770 |

A summary of these factors, indicating their labels, the items included, the variance they contribute to the overall variance, and their reliability is found in Table 6.7. Reliability is assessed using the Cronbach's alpha statistic. An alpha value that exceeds 0.7 is considered to indicate reliability.

Table 6.8: Detail of the Workplace Constructs

| Factor | Construct name and label | Items included | Variance extracted (%) | Reliability – Cronbach's alpha |
|--------|----------------------------------------------------------|-------------------------------|------------------------|--------------------------------|
| 1 | Organisational culture (ORG) | 17, 21 - 25, 29, 30, 35 | 42.42 | 0.885 |
| 2 | Individual encouragement/opportunities and support (IND) | 3, 6-10, 12 | 7.07 | 0.922 |
| 3 | Manager support (MAN) | 5, 11, 13, 16, 18, 19, 31, 33 | 6.08 | 0.874 |
| 4 | Technology support (TECH) | 26 - 27 | 4.10 | 0.790 |

* indicates significant at the 95% level

test statistic for a one-sample t-test

Single composite variables are formed for each construct by calculating the average of the scores across the items included in each construct. These constructs are then analysed to determine if there is significant agreement or disagreement that they exist in the municipality. Results (Table 6.9) show that there is significant agreement that technological, managerial and individual support exists in the municipality. There is also significant agreement that there is a culture of inclusion and ethical behaviour in the municipality.

Table 6.9: Analysis of Workplace Constructs

| Construct | n | Mean (SD) | t # | df | p-value |
|------------------|----------|----------------------|------------|-----------|----------------|
| ORG | 96 | 3.23 (0.744) | 3.033 | 95 | .003* |
| IND | 96 | 3.22 (0.874) | 2.487 | 95 | .015* |
| MAN | 96 | 3.72 (0.696) | 10.080 | 95 | <.001* |
| TECH | 96 | 4.10 (0.937) | 11.542 | 95 | <.001* |

* indicates significant at the 95% level

test statistic for a one-sample t-test

Further analysis, applying repeated measures ANOVA, was done to compare the differences in the perceived presence of these workplace constructs. Results show that there are significant differences across these workplace constructs, $F(3, 285) = 36.766, p < .001$. Post hoc analysis on the pairs using a Bonferroni adjustment shows that levels of manager support are perceived to be significantly 'better' than individual support ($p < .001$) and organisational culture ($p < .001$); while technical support is perceived to be 'better' than manager support ($p = .007$), individual support ($p < .001$) and organisational culture ($p < .001$).

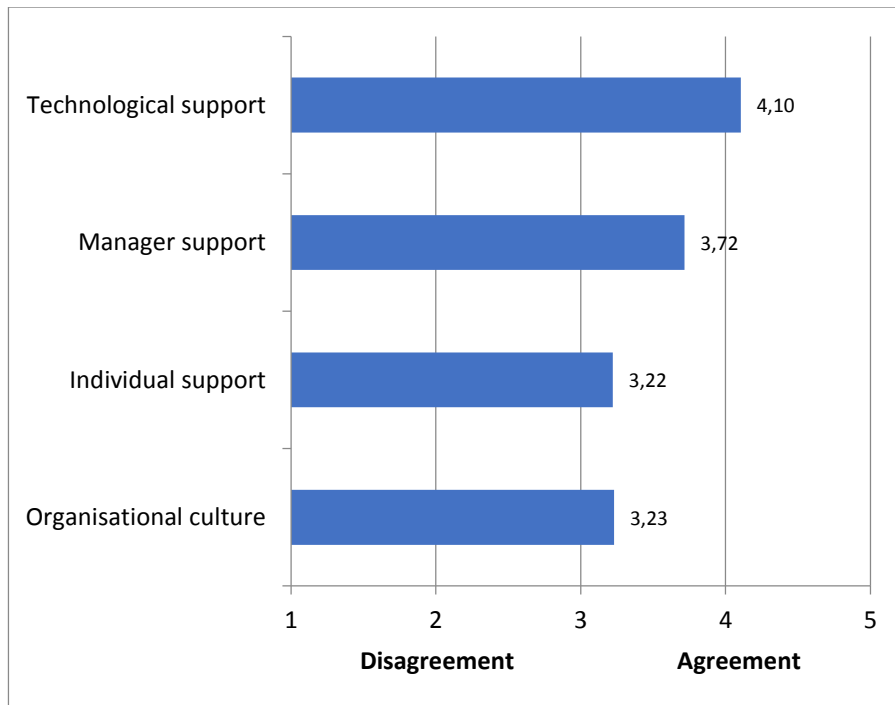


Figure 6.6: Average Agreement Levels of Workplace Constructs

6.22. Readiness to Integrate the Fourth Industrial Revolution

Six statements, measured on the 5-point Likert agreement scale, were posed to the participants to assess and investigate the general readiness of the Ethekewini Municipality to integrate the fourth industrial revolution and the effect of the 4th Industrial revolution on attracting and retaining millennials as well as creating an exciting and innovative workplace to enable them to thrive in the Ethekewini Municipality. Results (Table 6.10) show that there is significant agreement that respondents have a fair understanding of the fourth industrial revolution; that manual systems and bureaucracy are a barrier to conducting business in the Ethekewini Municipality; and that electronic software is used to design effective and efficient processes in their organisation. Furthermore, there is significant agreement that the 4th Industrial revolution both attracts and retains millennials in the municipality; and that it makes the workplace exciting and innovative for millennials to stay in the municipality.

Table 6.10: Analysis Summary: Readiness to Implement the Fourth Industrial Revolution

| Responses as Frequency (%) | | | | | n | Mean (SD) | t # | df | p-value |
|-----------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|-----------|----------------|----|--------------|--------|----|---------|
| Strongly disagree | Disagree | Neutral | Agree | Strongly agree | | | | | |
| General readiness | | | | | | | | | |
| I have fair understanding of the term 4th industrial revolution | | | | | | | | | |
| 2 (2.1) | 3 (3.1) | 13 (13.5) | 67 (69.8) | 11 (11.5) | 96 | 3.85 (0.740) | 11.317 | 95 | <.001* |
| In my organisation electronic software is used to design efficient and effective process | | | | | | | | | |
| 4 (4.2) | 14 (14.6) | 23 (24.0) | 51 (53.1) | 3 (3.1) | 96 | 3.37 (0.923) | 3.890 | 95 | <.001* |
| Manual systems and bureaucracy are a barrier in my organisation when conducting business | | | | | | | | | |
| 2 (2.1) | 9 (9.4) | 23 (24.0) | 39 (40.6) | 22 (22.9) | 96 | 3.74 (0.992) | 7.243 | 95 | <.001* |
| Attracting and retaining millennials | | | | | | | | | |
| The 4th industrial revolution attracts millennials to join the organisation | | | | | | | | | |
| 2 (2.1) | 10 (10.4) | 23 (24.0) | 50 (52.1) | 9 (9.4) | 96 | 3.57 (0.886) | 6.287 | 95 | <.001* |
| The 4th industrial revolution retains millennials in the organisation | | | | | | | | | |
| 3 (3.1) | 10 (10.4) | 29 (30.2) | 46 (47.9) | 8 (8.3) | 96 | 3.48 (0.906) | 5.183 | 95 | <.001* |
| The 4th industrial revolution makes the workplace exciting and innovative for millennials to stay in the Ethekwini Municipality. | | | | | | | | | |
| 3 (3.1) | 7 (7.3) | 24 (25.0) | 55 (57.3) | 7 (7.3) | 96 | 3.85 (0.854) | 6.690 | 95 | <.001* |

* indicates significant at the 95% level

test statistic for a one-sample t-test

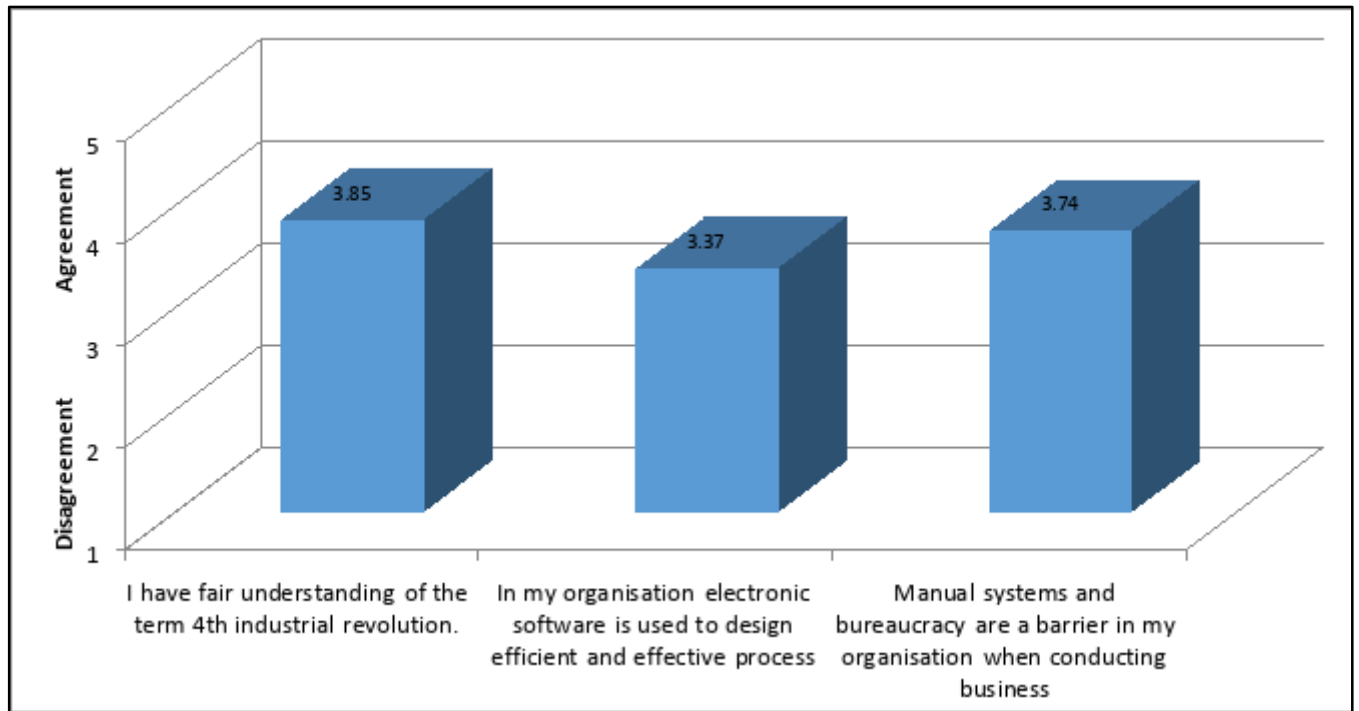


Figure 6.7: General Readiness

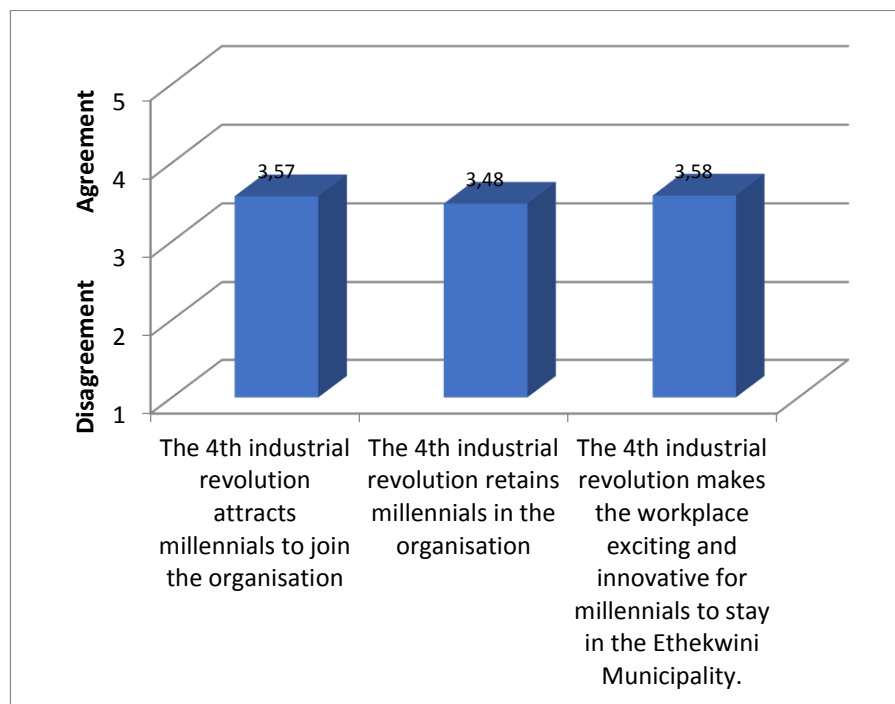


Figure 6.8: Attracting and Retaining Millennials

Respondents were asked to rate how ready they perceive the municipality to be to use technology to streamline processes and how ready they are to integrate millennials into the workplace through the use of technology. The scale used was 1 = not at all ready to 5 = very ready. These responses were grouped

into ‘not at all ready’ or ‘slightly ready’ (those who scored 1 or 2) and at least ‘moderately ready’ (those who scored 3, 4 or 5).

Results (Table 6.10 and Figure 6.9) show that a significant 63% rated the municipality ‘at least moderately ready’ to integrate millennials into the workplace. While a majority of these respondents rated the municipality as ‘at least moderately ready’ to use technology to streamline processes, this was not significant and therefore cannot be projected onto the population with any level of confidence.

Table 6.11: Readiness Ratings

| Item | Frequency (%) | | n | p-value # |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------|----|-----------|
| | At most slightly ready | At least moderately ready | | |
| The readiness of the EThekweni Municipality to integrate the 4th industrial revolution by using technology to streamline processes across the organisation | 40 (43) | 54 (57) | 94 | 0.180 |
| The readiness of the EThekweni Municipality to integrate millennials in the workplace through the use of technology. | 36 (38) | 60 (63) | 96 | .018* |

* indicates significance at the 95% level

binomial test

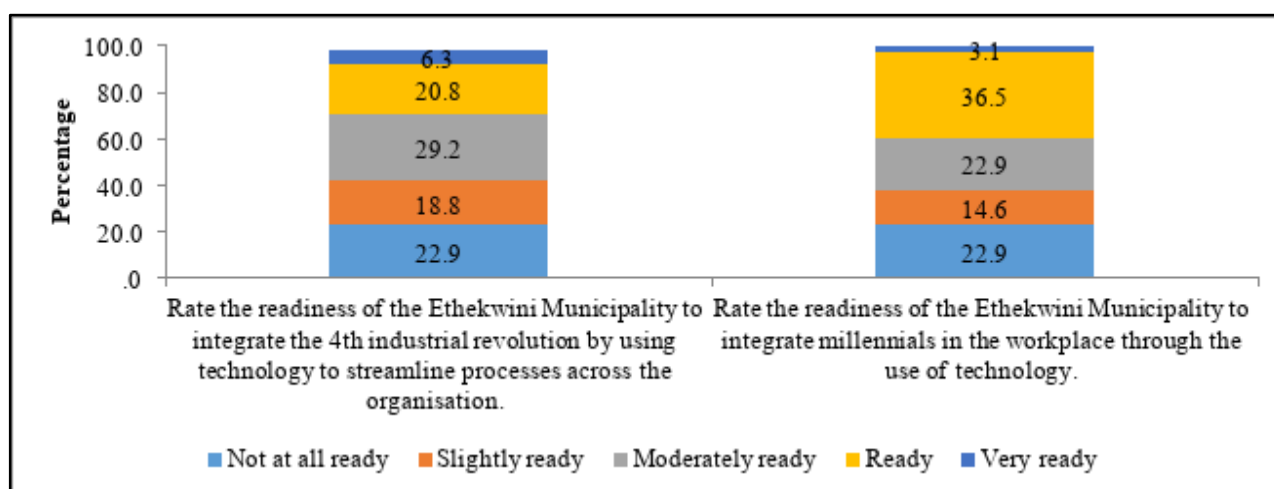


Figure 6.9: Ratings of the Readiness to Integrate Millennials and the Fourth Industrial Revolution

6.23. Leadership Styles Perceived as Necessary for Integration of the Fourth Industrial Revolution into the Municipality

Two questions were asked to identify the leadership style that the millennials prefer to integrate millennials and the fourth industrial revolution into the municipality. The participants were given a choice to select from four leadership styles. The leadership styles selected were closely aligned to the qualities that millennials require from leaders in the workplace. The figure below displays a graphical representation of the rankings of the responses selected by the participants relating to the leadership style they prefer. Results of a chi-square goodness-of-fit analysis show that a significant proportion of the participants prefer transformational leadership as the leadership style to be adopted to integrate millennials ($p < .001$) and the fourth industrial revolution ($p < .001$) into the Ethekewini Municipality.

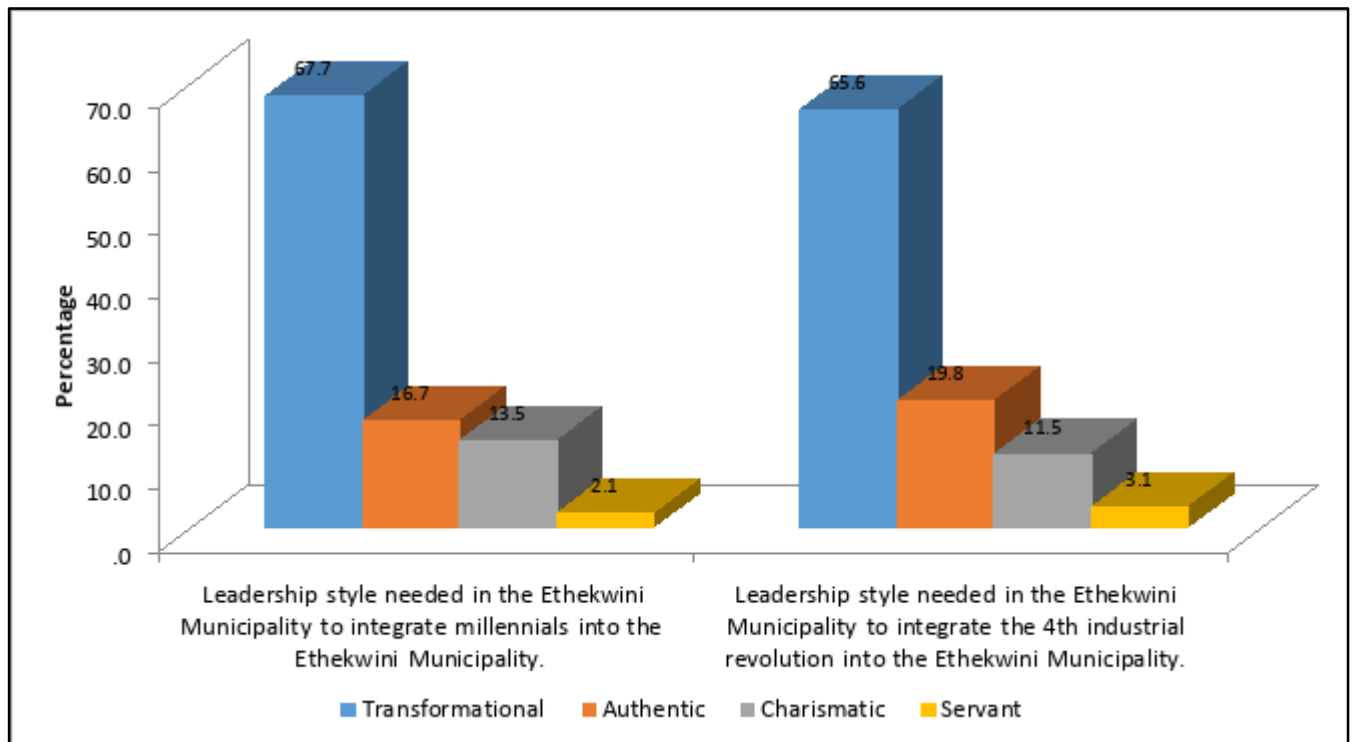


Figure 6.10: Leadership Styles Perceived as Necessary for Integration of the Fourth Industrial Revolution and Millennials into the Ethekewini Municipality

6.24. Preferred Leadership Style: Millennials' Perspective

In order to determine which leadership style is preferred by the respondents, they were asked to rate their level of agreement, using a five-point Likert agreement scale, to six statements on different aspects of each of the leadership styles. For each leadership style, the agreement score was summed across the six statements to give an overall score. The reliability of these summated scores was tested using Cronbach's alpha. These scores were then tested to determine if any leadership style is preferred over others. Because

these scores were not normally distributed, Friedman’s test, followed by the Wilcoxon Signed ranks test on each pair was applied. Results of the analysis (Table 6.12) show that these composite variables for the leadership styles are all reliable (alpha >.7). In addition, there is a significant difference in respondents’ preferences of the different styles, p=.009. In particular, Authentic is preferred to Servant (p=.027) and Authentic is preferred to Charismatic (p<.001).

Table 6.12: Preferences of Leadership Styles: Millennials’ Perspective

| Leadership style | Average of the summed scores | Reliability – Cronbach’s alpha | Friedman’s test | | |
|-------------------------|------------------------------|--------------------------------|-----------------|---------------------|---------|
| | | | Mean rank | X ² (df) | p-value |
| Transformational | 25.66 | .800 | 2.58 | 11.652 (3) | .009* |
| Servant | 25.55 | .857 | 2.39 | | |
| Authentic | 26.26 | .812 | 2.78 | | |
| Charismatic | 25.31 | .885 | 2.26 | | |

* indicates significance at the 95% level

6.25. Analysis of the Leadership Style Rankings

The millennials who participated in the questionnaire were provided with the definitions of the pertinent leadership styles, and the characteristics of each leadership style were clearly articulated. The rationale for providing the definitions and the characteristics of each leadership style was to ensure that the participants understood the theory thereby enabling them to provide authentic responses. Put differently, it was done to ensure meaningful engagement to achieve sound and reliable data. It was important to gauge whether the millennials share the same sentiments as the leaders that a mixed leadership approach is required in the Ethekwini Municipality to integrate millennials and the fourth industrial revolution. The responses obtained from the participants were aimed at assisting the researcher to develop a leadership style that will be feasible for the municipality to integrate millennials and the fourth industrial revolution. The millennials were asked questions separately to provide their responses on the leadership style required to integrate millennials and the fourth industrial revolution. The sample orders the types (from best to worst) as: authentic leadership; transformational leadership; servant leadership; charismatic leadership. The results revealed that transformational leadership is preferred to integrate millennials and the fourth industrial revolution. The results further revealed that the participants preferred the characteristics of an authentic leader in the workplace. The results seemed to suggest that although transformational leadership is required to integrate millennials and the fourth industrial revolution, the leadership qualities that the

millennials prefer are those of an authentic leader. The results indicate that a mixed leadership approach may be suitable for the Ethekwini Municipality. The results of the questionnaire were linked with the findings that emanated from the interviews with the leaders and the focus group with the millennials. From that, it was clear that the results from the questionnaire and focus group shared the view that the Ethekwini Municipality requires a mixed leadership approach; however, the leaders did not share a common view on the leadership style required, they instead mentioned various leadership styles that could be adopted in general by the organisation. Therefore, the prevalent view was that the organisation requires a mixed leadership style. The leaders and millennials expressed the similar view that the diverse nature of the working environment in which the municipality operates necessitates a mixed leadership style. The findings from the questionnaire show that there was a significant agreement that transformational leadership is required to integrate millennials and the fourth industrial revolution. Although transformational leadership was identified by the millennials in the questionnaire as a leadership style that can be adopted by the municipality to integrate millennials and the fourth industrial revolution, the general view considering the findings from all the data collection methods was that a mixed leadership approach is required. It was evident that, because of the diverse nature of the departments within the various municipal clusters, it may not be practical to adopt a transformational leadership style across the organisation. During the interviews the leaders indicated that the Ethekwini Municipality does not ascribe to a specific leadership style in the organisation to integrate millennials and the fourth industrial revolution, and neither did the leaders themselves have a preferred leadership style.

A few leadership styles were mentioned that could be adopted by the municipality, but these were the individual views of each leader based on their working environment and the mandate of their department. It appeared that the leaders had not considered the leadership style required to blend the millennials and the fourth industrial revolution into the workplace; their responses in fact indicated that they had not prioritised the millennials and the fourth industrial revolution in the organisation. Millennials are said to have the ability to work immaculately with technology, which is a skill required for the municipality to function efficiently and effectively. The leaders seemed to share the view that millennials are the fourth industrial revolution and that they will have a significant influence within the organisation to incorporate the use of technologies driven by the revolution. A similar view that millennials will be instrumental in the integration of the fourth industrial revolution was shared by the millennials who participated in the focus group. During the focus group discussions the millennials acknowledged that, although the municipality employed a large number of millennials, it still lagged behind the private sector in relation to the integration of millennials and the fourth industrial revolution. Since the millennials are the future leaders of the organisation, the municipality must consider their integration through the introduction of

the initiatives presented by the fourth industrial revolution. Research conducted by Deloitte in 2020 found that millennials prefer workplaces that have leaders who are keen on providing a working environment that is flexible and able to adapt to a technologically savvy working environment. Hence, it was important to understand from the millennials' perspective which leadership style is required by the Ethekewini Municipality to integrate them and the fourth industrial revolution. The findings revealed that the leaders had an inconsistent comprehension of the term fourth industrial revolution and a diverse understanding of the term millennials. As a result, the responses provided by the leaders did not provide information that can be used to develop a leadership model for the Ethekewini Municipality. Recognising that millennials are the key to understanding the type of leader that will integrate them and the fourth industrial revolution, the researcher used the responses received to the questionnaire and in the focus group as a starting point to determine the appropriate leadership model for the municipality to adopt. The leaders' shared view was that the millennials will be the cornerstone of the future direction of the organisation, relying on their expertise on the use of advanced technology to adapt to the fourth industrial revolution. The Friedman Test applied to the data revealed that none of the leadership styles selected can be applied independently by the municipality. Additionally, based on the leadership styles selected above, there was not a specific leadership style that combined both transformational and authentic leadership. The findings revealed that the municipality may require a combination of a leader who has qualities of transformational and authentic leadership.

It was evident in the findings that transformational leadership may be preferred by the millennials for providing strategic direction; however, authentic leadership may be preferred from an interpersonal perspective. Although there is literature on the individual leadership styles, the literature does not provide information on a combination of both leadership styles. Hence, the combination of these leadership styles in this research makes a contribution to existing literature and provides the municipality with a foundation on which to build towards the integration of millennials and the fourth industrial revolution. It appears from existing literature that leaders ordinarily rely on a specific leadership approach in the workplace to ensure uniformity (Anderson & Sun, 2019). In a rapidly changing business world, organisations may consider utilising different leadership styles based on their strategic objectives, external factors and the nature of the business (Maria, Zacharias & Schnellbaecher, 2018). It appears there is a lack of existing literature that focuses on the leadership style required to integrate millennials and the fourth industrial revolution. Furthermore, there is a dearth of literature of a mixed leadership approach to integrate millennials and the fourth industrial revolution. However, the results of this study demonstrate that the leadership of the Ethekewini Municipality should consider developing a new leadership approach which will assist it with integrating millennials and the fourth industrial revolution. Taking into consideration the

findings of the study, a leadership model has been developed based on the preferences of the millennials and the responses from the leaders indicating that a mixed leadership style is required by the organisation. A combination of transformational and authentic leadership is recommended in a newly identified leadership style named Transforthetic Leadership. The transforthetic leadership model has been developed based on the leadership qualities and leadership style preferred by the millennials in the workplace and the suggestion from the leaders that a mixed leadership approach may be required by the Ethekewini Municipality. The leadership model has been developed taking into consideration the highest-ranking leadership qualities preferred by the millennials and the leadership style preferred by the millennials to integrate them and the fourth industrial revolution as well as the findings of the interviews with the leaders. It was important to discuss the current leadership style utilised by municipality to demonstrate that there is a need to develop a new leadership model to integrate millennials and the fourth industrial revolution.

6.26. Transactional Leadership

The current leadership style utilised by the municipality is transactional, based on its significant emphasis on a structured environment as opposed to an environment in which change and flexibility in decision making is recognised (Nxumalo & Nxumalo, 2021). Transactional leaders are focused on using structured policies and procedures to ensure that employees comply with the objectives of their organisation, and motivating those employees who meet the objectives with rewards (Chen, Zhao & Tian, 2021). The leaders and millennials agreed that the Ethekewini Municipality utilises a transactional leadership approach. The study found that most employees are content to do just enough to receive their salaries and are happy with the status quo because of the incentives and employee benefits offered by the organisation. One of the characteristics of transactional leadership is that it offers rewards to employees who meet their goals. The municipality clearly uses transactional leadership to manage its employees and does not offer a creative and innovative working environment. As this study shows, the introduction of a new leadership approach is required to change the current culture of the organisation.

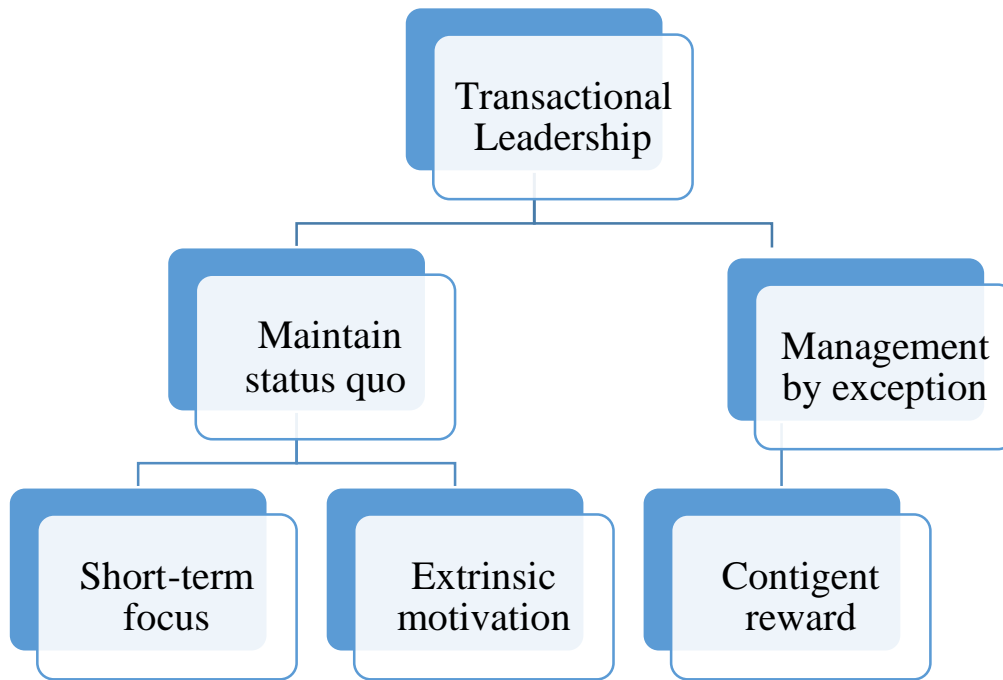


Figure 6.11: Transactional Leadership Model: Current Leadership Style at the Ethekewini Municipality

Source: Van Dijk, Kark, Matta & Johnson (2020).

The findings showed that the Ethekewini Municipality is not yet ready to integrate millennials and the fourth industrial revolution because of its culture which promotes bureaucracy. Organisations that utilise a transactional approach make provision only for short-term goals, the leaders fail to think ahead and plan for the future. It was evident in the findings that the organisation has not put in place in its integrated development plan (IDP) any strategic plans to incorporate advanced technology to align it with the rest of the world. In contradistinction to this, transformational leaders are known to provide strategic direction and to encourage innovation and creativity within organisations. The results further indicate that the leaders use individual leadership styles which may not be appropriate to lead millennials. The findings show that the qualities of an authentic leader were preferred by the millennials, hence the recommendation for a combination of transformational and authentic leadership. The contrast between the current leadership style and the leadership model developed is that the needs of the millennials are catered for psychologically and organisationally. The study has presented four leadership styles that are closely linked to the qualities required by millennials from a leader and their preferred working environment to ascertain the appropriate leadership style for the municipality to integrate millennials and the fourth industrial revolution. The study also investigated the millennials' perspective on the readiness of the Ethekewini Municipality to integrate them and the fourth industrial revolution. Overall, the study found that the Ethekewini Municipality is not ready to integrate millennials and the fourth industrial revolution; therefore a leadership model is required to mitigate this lacuna. A mixed methods approach has been recommended

for use to assess, from a leadership perspective, whether the organisation is ready to integrate millennials and the fourth industrial revolution. Consequently, the transforthetic leadership model was recommended to the Ethekewini Municipality to integrate millennials and the fourth industrial revolution. The transforthetic leadership style was developed as a new concept that can be researched further within the local government sphere. The characteristics of a transforthetic leader were developed from the qualities with the highest rankings identified in the study.

6.27. Transforthetic Leadership

The transforthetic leadership model has been developed as a tool to slowly transition the Ethekewini Municipality to the integration of millennials and the fourth industrial revolution. The leadership model developed combines transformational and authentic leadership to compel the municipality to utilise the fourth industrial revolution to attract and retain millennials into the workplace. Transformational leadership is known for its robustness and for providing strategic direction, which is crucial to transform the organisation from a transactional one to one that utilises the fourth industrial revolution to achieve the strategic objectives of the municipality. Research has shown that millennials are self-aware, genuine and thrive in organisations that are transparent which are qualities that are required of an authentic leader. A study was conducted that compared the impact of transactional and transformational leadership on an organisation and its employees (Aboramadan & Kundi, 2020). Transformational leadership was found to be more effective in fostering a culture of commitment and high performance through engagement than transactional leadership. The transforthetic leadership model, as developed in this study, creates a balance for the organisation from a business and people management perspective. The transforthetic leadership style is a new concept which requires further research; however, the model will be explained relying on findings emanating from the study. Transforthetic leadership can be defined as an approach to leadership that accentuates a leader's ability to provide strategic direction and deliver results whilst building and maintaining strong relationships.



Figure 6.12: Transforthentic Leadership Model: Proposed Leadership Style

It was evident that the Ethekewini Municipality requires leaders who possess the qualities of a transformational leader to drive the strategy of integrating millennials and the fourth industrial revolution and also the qualities of an authentic leader with the ability to build strong relationships and gain the trust of others. The findings of the study provide a basis for the municipality to assess what is currently not working within the organisation. The leaders and the millennials have provided their perceptions of the organisation and what changes should be made to ensure municipal efficiency in the delivery of services to communities. A new leadership style will assist the top management of the Ethekewini Municipality with a foundation on which to build a strategy to integrate millennials and the fourth industrial revolution. As mentioned above, the leaders acknowledge the role of millennials and the impact that the fourth industrial revolution can have on the organisation, but they all agree that there is a lack of implementation because of the red-tape culture that exists. Therefore, a mixed leadership approach may be required by the organisation to use the fourth industrial revolution to attract and retain millennials who will drive the strategy of the organisation using advanced technology. It was apparent from the responses of the leaders and the millennials that a new leadership model needs to be adopted and that leaders need to be trained on the methods they can use to lead millennials and the fourth industrial revolution since both concepts are new to the organisation and to themselves. The study found that the leaders have not started thinking about millennials and what their role will be in a future that includes the fourth industrial revolution. The Ethekewini Municipality does not have a strategy to integrate millennials and the fourth industrial revolution, and it is accepted that it needs to develop a leadership model that will provide guidance in relation to the type of leader required in the future to achieve its long-term strategic objectives. The

findings revealed that the leaders acknowledged that the fourth industrial revolution will have a tremendous impact on the fast-tracking of service delivery, yet, despite this, the organisation has not even begun to implement strategies designed to integrate the initiatives of the fourth industrial revolution. This state of affairs justifies the development of a new leadership model. The transforthentic leadership style will assist the organisation to eliminate the above problems. The municipality can then begin to strategise how the fourth industrial revolution will align to the organisation's business practices and to its desire to achieve the 2030 goal to become the most liveable city in Africa. The transforthentic leadership model has the potential to provide the Ethekewini Municipality with the foundation on which to establish leadership development programmes to assist in the transition from its current state of unpreparedness to integration of millennials and the fourth industrial revolution. It was evident in the findings that the municipality has the internal resources to develop leadership programmes to assist the organisation with this task. The leaders suggested that various departments within the municipality, such as the Human Resource Department, the Municipal Academy, the Change Management Unit and the Talent Management Department, can intervene and assist the leaders of the municipality to adopt a transforthentic leadership style. The study found that the organisation may require a change management model to integrate a new leadership model in the workplace to ensure that millennials and the fourth industrial revolution are included. It appeared from the study that the leaders were receptive to the idea of integrating millennials and the fourth industrial revolution in the municipality; therefore, the acceptance of the transforthentic leadership model will be valuable to the organisation.

The findings further revealed that the municipality may require transforthentic leaders who will need to possess the ability to persuade the organisation to change its approach to one that includes the use of advanced technology, to have the skills necessary to drive the strategy of the organisation and to have the ability to attract followers because of their authentic character. The qualities of a transforthentic leader were identified as follows from the data analysis:

Strategic direction: Transforthentic leaders provide strategic direction to the organisation and take their followers on a journey to collectively achieve a shared goal and acquire the desired results.

Intellectual stimulation: Transforthentic leaders encourage others to generate ideas, to explore and to create new innovations that inspire change and forward-thinking.

Organisational renewal: Transforthentic leaders have the ability to create unity and harmony within the organisation through collaboration and teamwork.

Reward and recognition: Transforthentic leaders recognise individual participation, value individual uniqueness and reward excellence.

Trust: Transforthetic leaders build long-lasting relationships with followers through demonstration of credibility and reliability.

Ethics: Transforthetic leaders lead by example and strive to maintain integrity and ethical behaviour in the workplace.

The characteristics of a transforthetic leader can be developed and embedded at the EtheKwini Municipality through commitment from top management continuously to train and develop existing and new leaders to create a culture that encourages them to utilise a shared leadership style. Furthermore, this leadership style can be used by the municipality to gain a better understanding of millennials and to develop leaders required by the organisation to achieve its long-term strategic objectives through the integration of the fourth industrial revolution.

6.28. Digital Leadership

The findings of the interviews with the leaders of the municipality and the millennials revealed that the EtheKwini Municipality has not developed strategies to integrate the fourth industrial revolution. It was evident from the responses that the organisation will require digital leadership to be at the centre of transforming the municipality towards the integration of the fourth industrial revolution. The leaders in their responses indicated that the municipality does not have a long-term strategy that incorporates the opportunities that the fourth industrial revolution presents to make administration and service delivery efficient within the organisation. The millennials shared their views that the leaders within the municipality have not prepared the working environment for the opportunities and challenges presented by the fourth industrial revolution. The need to utilise the opportunities of the fourth industrial revolution was acknowledged by the leaders and millennials during the interviews and focus group to streamline processes within the organisation to enable service delivery and to provide insight to the leaders on the transformation required to lead in the digital era. By so doing, millennials will start to experience transformation from a technology perspective which has been known to stimulate them and may lead to millennials becoming more productive and engaged in the EtheKwini Municipality.

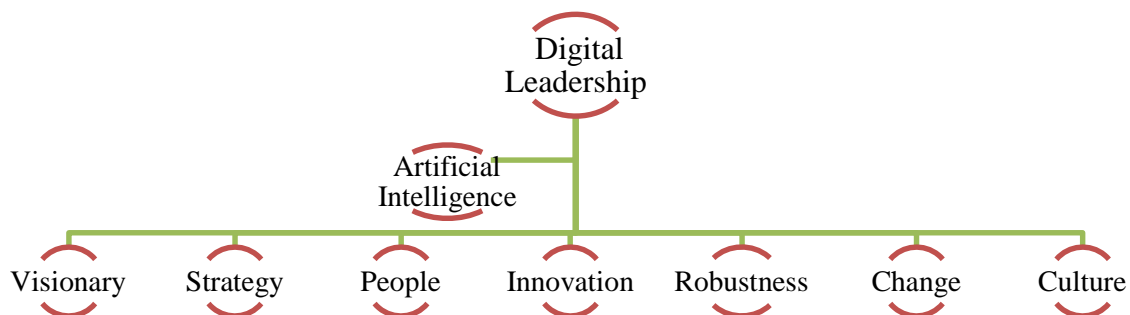


Figure 6.13: Digital Leadership Model to Implement Fourth Industrial Revolution Strategies

A need for a change in the culture of the organisation and a shift of the current mindset of the leaders was common in the responses shared by the leaders and millennials; therefore, necessitating the development of a digital leadership model that can be implemented in the municipality to integrate the fourth industrial revolution. The majority of the responses provided by participants in the interviews and focus group shared a futuristic view of the benefits the fourth industrial revolution would bring to the organisation; however, there was a sense of recognition that a different leadership approach was required to implement digital strategies. The findings from the data suggest that the implementation of digital leadership will require the organisation to go through change management and institute training and development programmes to build a digital culture across the organisation. The transforthentic leadership model developed in the study will equip the leaders to become digital leaders. The Ethekewini Municipality has a long-term strategy which the organisation aims to achieve by 2030; hence, there is a need to introduce robust innovations through artificial intelligence using the fourth industrial revolution, particularly in a country such as South Africa that has not adopted a national strategy for the future in a rapidly growing technological environment.

6.29. Dimensions of Digital Leadership

The digital leadership dimensions provide insight into what is required from leaders and organisations to create a culture that promotes effective digital transformation. In most organisations, some leaders will naturally adapt easily to change, whilst other leaders may resist the change required to lead in the digital era. Therefore, it is important to introduce the digital leadership dimensions to achieve transformation and organisational alignment.

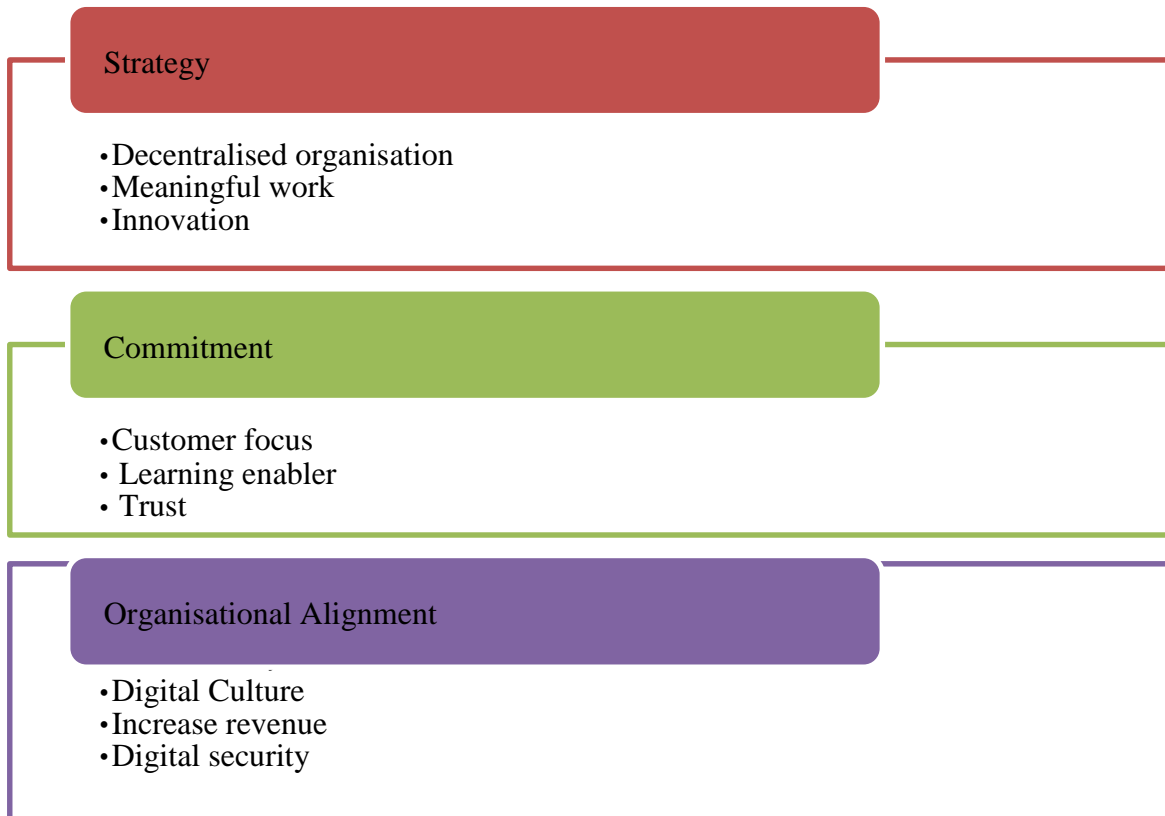


Figure 6.14: Digital Leadership Dimensions

Strategy

Decentralised organisation: Top management delegates responsibilities to employees to make decisions that will benefit the organisation which increases trust, job satisfaction and productivity.

Meaningful work: Provide employees with meaningful work that challenges them to think out of the box through the use of technology to enhance their knowledge and create efficiency.

Innovation: Create excitement and develop organisational practices that encourage employees to develop their skills, knowledge, experience and creativity. Provide employees with the platform to explore their full potential whilst enhancing business performance.

Commitment

Customer focus: The community, customer service and service delivery are the priorities to be achieved through the use of artificial intelligence and advanced technologies. Leaders ensure diverse engagement with external stakeholders to create flexibility and innovation partnerships.

Learning enabler: Focuses on building diverse skills to develop future digital leaders. Shares the vision of the digital future the organisation aims to achieve and uses new technologies to enhance business continuity.

Well-being: Focuses on finding a balance to adequately cater for the needs of employees and the organisation. Employees are understood by actioning the feedback received from employees to enable collaboration.

Organisational Alignment

Digital culture: The organisation focuses on developing leaders who embrace the opportunities of new technologies to transform the culture into the digital era. Leaders promote the values and behaviours that shape the future of the organisation which support the use of new technologies.

Increase revenue: Encourages the use of digital technologies and analytics to improve the decisions taken by the leaders to create new strategies and implement revenue growth through the use of technology.

Digital security: Implement digital security strategies to enable the implementation of the digital future within the organisation and to create positivity and enthusiasm to engage and connect with others in the digital future.

6.30. Conclusion

The findings gleaned from the semi-structured interviews, focus group and the questionnaire were crucial to illustrate the opinions, experiences and perceptions of the leaders and the millennials within the Ethekwini Municipality. The participants gave a holistic view of the topic and expressed their views based on their experiences relating to the fourth industrial revolution, millennials and leadership at the municipality. The participants presented a futuristic perspective on the benefits to the municipality of integration of the fourth industrial revolution. The millennials disclosed their challenges in working for an organisation that had not prepared the working environment for the fourth industrial revolution, which challenges were exacerbated by the Covid-19 global pandemic. The millennials offered a futuristic view of how the fourth industrial revolution will disrupt the workplace with, for instance, remote working which the municipality is not prepared for. The millennials shared the opinion that the pandemic exposed how unprepared the organisation was for the integration of the fourth industrial revolution. The millennials also provided recommendations on how the fourth industrial revolution can be utilised in the future to enhance the strategy of the municipality and gave their views on the leadership style the municipality should adopt to integrate millennials and the fourth industrial revolution.

The themes and sub-themes that emerged from the interviews and focus group were used to analyse the scope of the views expressed by the leaders and the millennials relating to leadership, millennials and the fourth industrial revolution. The responses received from the questionnaire were analysed and provided greater insights into the opinions of millennials on various aspects of the topic including their work preferences, leadership and the extent to which the municipality has utilised the fourth industrial

revolution. The mixed methods approach allowed the researcher to garner opinions and views from both leaders and millennials based on their personal experiences within the organisation. This created a good balance in the study and eliminated bias. In Chapter Seven the discussion will elaborate further on the key findings of the study.

CHAPTER SEVEN: DISCUSSION

7.1. Introduction

This chapter discusses the findings of the data collected through semi-structured interviews and the questionnaire. The data collected is analysed and linked to the literature review and the findings of similar studies. The research investigated various matters relating to millennials, such as their work preferences, their relationship with the fourth industrial revolution and the leadership style they prefer in the Ethekewini Municipality. The impact of the fourth industrial revolution in the Ethekewini Municipality was explored, as were the various leadership styles that may be adopted to integrate millennials and the fourth industrial revolution. The data collected was instrumental to the findings of the study which presented valuable insights that have enhanced existing literature and contributed to new theory. In the preceding chapter, a leadership model was developed emanating from the findings that can be adopted to effectively integrate millennials and the fourth industrial revolution into the Ethekewini Municipality. This chapter will first discuss the theoretical and conceptual framework of the study, secondly, provide a brief analysis of the research methodology applied, and lastly, conclude by discussing the key findings of the study.

7.2. Conceptual Framework

Chapter 1 of the Constitution of the Republic of South Africa mandates government institutions, including the Ethekewini Municipality, to ensure accountability, responsiveness and openness to provide, among others, services to communities in a sustainable manner (Constitution of the Republic of South Africa, 1996). The White Paper on Local Government expresses the view that the country has been given an opportunity to transform local government to respond to the challenges presented in the future (White Paper on Local Government, 1998). In terms thereof the leaders within municipalities have the responsibility to ensure that they adopt leadership propositions that will make a positive impact on the provision of services in an efficient manner through the use of technology (Biljohn & Lues, 2020). From a transformation and agility perspective, leadership in local government has been identified to be at the core of creating a working environment that encourages innovation, agility and critical thinking to deliver on the mandate of municipalities (Mello & Fombad, 2018). This view is supported by Mukonza & Mukonza (2014) who noted that leadership is required to develop open and transparent strategies to produce new and improved working environments that promote innovation that will lead to economic growth. Additionally, Osah & Pade-Khene (2020) share the view that leadership is required for municipalities to adapt to digital initiatives that will be used to support service delivery, improve engagement with communities and implement the various opportunities presented by technology. Consequently, municipalities like Ethekewini need leaders who can develop innovative strategies to

address, among others, youth unemployment and service delivery, whilst remaining relevant in the changing world of technology (Marivate, Aghoghovwia, Ismail, Mahomed-Asmail & Steenhuisen, 2021). The opportunities presented by the fourth industrial revolution have been identified as a fundamental tool to address the rise of millennials employed in the local government sphere and to provide them with a working environment where they can make a meaningful contribution to system efficiency and the development of day-to-day strategies that promote innovation (Gumede, Bvamukama & Dakora, 2019). Binns & Nel (2016) assert that leadership should be at the forefront of developing and implementing turnaround strategies that allow municipalities to become efficient in their efforts to deliver services to communities and to use the innovation of the youth to generate new ideas. Chou, Bove, Ramser & Han (2021) contend that leaders within the public sector, including local government, must prioritise the development of millennials to move away from bureaucracy and adopt transformational leadership to develop a modernised culture. The organisational culture of organisations has been found to create conflict between leaders and millennials, therefore creating the need for the adoption of a leadership style that millennials can relate to for the benefit of those organisations (Childs, Gingrich & Piller, 2017). Millennials are motivated by technology and require effective leaders who can operate at as rapid a pace as they do (Copeland, 2021). The future success of local government, with retirements looming for the older generation, requires immense investment in millennials and technology to ensure efficiency, productivity and innovation (Yadav & Chaudhari, 2020).

Thus, it can be said that the fourth industrial revolution in municipalities will be driven by millennials and leaders who are innovative and adjust to workplace realities. It is therefore clear that the municipality must prepare the working environment for the rapid changes that will emanate from embracing technology and millennials in the workplace. This study will provide some guidance in this regard in the recommendations chapter.

7.3. Discussion of Mixed Methods Data

As indicated in Chapter Four, a mixed methods approach was used in this study through the use of semi-structured interviews, a focus group and a questionnaire. A total of fifteen (15) leaders across various departments and occupational levels in management positions participated in the interviews, six (6) millennials participated in the focus group, and ninety-six (96) millennials successfully participated in the questionnaire. Simple random sampling was used to select the participants and purposive sampling was used to select the participants for the interviews and focus group. The participants were adequately representative for both the qualitative and quantitative method to ensure the purposes of the study and its reliability and validity.

7.4. Reliability and Validity of the Study

The reliability and validity of the study were important in order accurately and adequately to reflect the authenticity of the subject under deliberation. In a mixed methods study, reliability and validity are imperative to guarantee that the data collected is credible and accurate, thus ensuring that the data is interpreted in a manner that measures the relationship between variables (Lewis & Saunders, 2018). The data from the interviews, focus group and questionnaire were analysed to develop themes and relationships between the variables which contributed to the findings. The demographic information of the participants was shared in the previous chapter. This chapter will discuss the key findings obtained from the data shared by the participants.

7.5. Differences between Millennials and the Older Generation

The results of the study revealed that the attitudes, work ethic, motivation and expectations of millennials are different from the older generation. Millennials are different from the older generation and have different preferences in the workplace (Krell, 2017). This is also evident in the South African context in the public and private sectors where millennials are not understood by the older generation (Sharma & Albus, 2017), although the private sector, particularly the manufacturing sector in South Africa, is investing heavily in millennials and providing them with training and development programmes aligned to the fourth industrial revolution (Kark, Van Dijk & Vashdi, 2020). A gap still exists between the two generations in the workplace; however, leaders in the private sector are gradually becoming aware of the work preferences of millennials and the need to lead them with a different approach (Wood, 2019). It was evident from the findings that millennials are a unique generation compared to the older generation in the municipality, and this requires leaders who have a willingness to understand, nurture and offer development opportunities to millennials. This perspective was shared by the millennials who participated in the questionnaire – it was clear from the frequency of the responses that agreed and strongly agreed that millennials are different from the older generation.

The responses show that 88.5% of the participants were in agreement that millennials are different from the older generation. The study found that the difference and misunderstanding between the two generations are based on the perceptions leaders have of the millennials, the leaders described them as different with contrasting work preferences. It must be taken into consideration that millennials were born into a technology era which influences their preferences (Kilber, Barday & Ohmer, 2014). Millennials were born into the evolution of the internet, which has shaped their thinking and the way they do things, and they consequently require a different leadership approach (Hoffman, 2017). Millennials need leadership rather than being managed in the workplace in order to reach their potential and make an impactful contribution (Queen & Harding, 2018). In addition, millennials are regarded as the generation

whose coming has forced leaders to adopt robust systems to solve problems that make organisations less efficient (Kuron, Lyon, Schweitzer & Ng, 2015). Millennials require a leader who is patient and understanding, one who can identify and nurture their talents based on their eagerness to acquire knowledge and experience within a short period of time (Sarikaya & Atsan, 2021). Leaders have described them as irrational at times and ahead of their time; hence, requiring leaders to constantly guide them. It was evident that the leaders did not have the time to nurture the millennials because of their primary commitment to service delivery, and this resulted in a disconnection between the two generations. Therefore, it was clear that a leadership model was required to address the gap that exists between the two generations in the municipality.

7.6. Work Preferences of Millennials in the Workplace

The findings of the study suggest that the work preferences of millennials are not taken into consideration in the municipality. A significant number of the millennials did not agree or disagree that their work preferences were taken into consideration, with a high number of them selecting neutral on the Likert scale as shown on Table 6.12. Millennials require leaders who view and accept them as a generation that flourishes in organisations that are innovative, agile and use technology to continuously enhance the workplace (Chou, Bove, Ramser & Han, 2021). The leaders in their responses created the impression that the preferences of the millennials are different from their own, which contributes to the lack of synergy between the older generation and millennials. This was corroborated by the responses received from the millennials which did not have a significant number of responses agreeing that their work preferences are not taken into consideration in the municipality. The leaders may not understand the work preferences of millennials based on the relationship millennials have with technology, social media and cellphones (Eastman, Iyer, Lia-Troth, Williams & Griffin, 2019).

Millennials are viewed as a curious generation that is confident with developing and implementing new ideas and is not reserved about venturing into the unknown (Payton, 2015). This is contrary to the older generation which is described as reserved and conservative in the workplace and is dependent on traditional methods to conduct business (Snow, 2011). Additionally, millennials are regarded as the generation that will compel leaders to adopt robust systems to create solutions to problems that make organisations less efficient (Kuron, Lyon, Schweitzer & Ng, 2015). Therefore, leaders in organisations need to understand them as a generation and not contribute to creating myths that produce misconceptions (Badibanga & Ohlson, 2021).

7.7. Millennials and the Fourth Industrial Revolution

The responses given in Table 6.3 show that millennials are highly dependent on technology. This indicates a relationship between millennials and the fourth industrial revolution. The findings of the study demonstrate that millennials prefer to use the internet and computers at work for research. The millennial generation was born into the era when technology was evolving as a tool to enhance access to information, knowledge and learning, hence their dependence on it has filtered through to the workplace (Balaji & Vaidhyanatha, 2015). The leaders in their responses said that their over-reliance on the internet was a sign of laziness. The contrasting views on technology may contribute to the misunderstanding between the older generation and millennials. Millennials prefer to use technology to access information quickly and to enhance their knowledge, whereas the leaders believe that millennials do not want to think about an issue, instead they too readily rely on the internet for all their information, and are concerned that this has an impact on their learning. Millennials are known to use their smart phones to communicate across the organisation, this is frustrating for the older, conservative and traditional generation (Deal, Althman & Rogelberg, 2011). It has been said that the appropriate leadership is the means by which to reach a common understanding between the leaders and millennials in relation to work ethic, values and preferences (Dwivedi & Lewis, 2021).

The millennials' responses to the statement 'leaders in my organisation are skilled to lead millennials' in Table 6.7 show that the majority was neutral (40%). There was not significant agreement that the leaders in the municipality were skilled to lead millennials. Hence, the need for the development of a leadership model that will equip the leaders to understand the relationship between millennials and the fourth industrial revolution. Millennials prefer collaborative leadership which allows them to share and generate new ideas that are driven by technology (Abram & Luther, 2016). Millennials require leaders who share the same sentiments as they do in order to create a synergy between the two generations (Ferri-Reed, 2019). Millennials are known to favour open communication through the use of technology on their mobile phones, whilst the older generation prefers formal traditional communication methods (Martin, 2017). It is therefore submitted that the Ethekewini Municipality must adopt a leadership style that millennials can identify with and one that will develop leaders to lead millennials effectively.

7.8. Organisational Culture

The evidence from this study indicates that the organisational culture of the municipality may be hindering the integration of millennials and the fourth industrial revolution. The emergence of millennials necessitates a dynamic shift towards developing an organisational culture that is innovative, flexible and agile, propelled by the use of technology (Jain & D'lima, 2017). The millennials and the leaders within the Ethekewini Municipality acknowledged that the current culture in the organisation is transactional and

bureaucratic, and is sorely in need of senior leadership which is competent to work towards developing an organisational culture that will integrate millennials and the fourth industrial revolution. This view is supported by Baiyun, Ramkissoon, Greenwood & Hoyte (2018) who assert that millennials have become contributors to the overall functioning of organisations, and this requires the leadership to understand the characteristics and preference of millennials in the workplace. The findings of the study revealed that the culture of the organisation has not evolved to embrace millennials and the fourth industrial revolution. This was consistent with the results of the questionnaire which indicate that there are significant differences across workplace constructs relating to organisational culture. In particular, the level of manager support and technical support were perceived to be significantly better than individual support and organisational culture within the organisation. The findings further reveal that the Human Resource Department within the municipality has not effectively assisted the organisation to develop an organisational culture that is inclusive of millennials and the fourth industrial revolution. The Human Resource Department of an organisation is the department that is instrumental in assisting the organisation to entrench an organisational culture that sets out the standard for everyone (Haenlein & Kaplan, 2019). It appeared from the findings that the culture of the municipality has not evolved, a transactional leadership culture is still entrenched within the municipality. Organisational culture dictates how things are done in an organisation, and this determines whether the leadership will be effective in establishing the norms, behaviours and attitudes adopted by an organisation (Reuteman, 2017).

The results confirm that both the millennials and the leaders shared the common view that the organisational culture of the municipality hindered the integration of millennials and the fourth industrial revolution. The literature confirms that leaders at all levels of an organisation can contribute to and build its culture by influencing the behavioural norms, policies and the standards that the organisation adopts (Clark, Gormley, Colella & Glazer, 2022). Therefore, it is obvious that the municipality must commit to utilising the leaders within the organisation to influence the integration of millennials and the fourth industrial revolution in order to develop the agile and innovative culture necessary for millennials to thrive.

7.9. Political Interference and Professionalism in the Municipality

The study found that political interference plays a major role in the municipality's processes, policies and procedures. The leaders said that political interference detracted from their ability to implement the strategies necessary to integrate millennials and the fourth industrial revolution. The municipality comprises of an administration and a political function. The decisions made at administrative level must be approved by the political structures of the municipality, and this hinders the introduction of strategies promoting the fourth industrial revolution in the workplace because of the perception that the fourth industrial revolution will lead to job losses. As a result of interference by political structures, the leaders in the municipality are unable to make meaningful, professional contributions in their departments, and

are instead expected to focus on the service delivery interests of the politicians. The leaders complained that they have to shift their focus from developing and strategising on programmes such as the integration of millennials and the fourth industrial revolution to ensure that the organisation fulfils its political mandate. In order to ensure that public servants contribute professionally in all spheres of government, politicians have a responsibility to lead ethically, guided by the values of the public sector, and must not influence administrative processes (Falco & Kleinhans, 2018). The role of politicians is to ensure good governance in municipalities by making sure that there is a balance between effective service delivery to communities and efficient administration (Vogl, Seidelin, Ganesh & Bright, 2020). The responses from the leaders showed that they were not able to focus on the implementation of programmes promoting the integration of millennials and the fourth industrial revolution because service delivery was the primary objective of the municipality. The leaders appeared to be disgruntled and discouraged by the restraints imposed on them in a working environment highly influenced by politicians. The findings also show that politicians view the fourth industrial revolution as a threat to their mandate of job creation because of their mistaken view that the revolution will destabilise the municipality and lead to job losses.

The professionals in the public sector must be given an opportunity to develop strategies that are aligned to the global advancement of technology with minimal interference from external sources, including political servants (Collins, Shiffman & Rock, 2017). Therefore, it will be beneficial for the municipality to empower leaders to provide strategic direction and work towards aligning the organisation to the evolving world of work. The leadership development training required by the organisation to adopt a new leadership model should be extended to the training of politicians to provide them with an understanding of the fourth industrial revolution and the opportunities that the use of technology will have on fast tracking service delivery. In this way, the organisation can minimise interference through collaboration and awareness training.

7.10. Covid-19 and the Future of Work

The global Covid-19 pandemic has put a tremendous burden on organisations such as the EtheKwini Municipality to respond to and manage unexpected change in the workplace. The study found that the organisation is not ready to integrate the fourth industrial revolution, and this was exacerbated by the emergence of the global pandemic. The millennials who participated in the focus group strongly felt that the pandemic negatively affected the municipality from a planning perspective and exposed its unpreparedness to deal with emergencies that affect business continuity. The millennials agreed that the organisation did not have a strategy in place to deal with the problem of having a large number of employees working remotely due to the national lockdown. The organisation lost revenue because it did not have the right tools, resources and equipment to deal with employees having to work remotely. The findings suggest that the Covid-19 pandemic propelled the municipality into utilising technology to

conduct day-to-day operations and introduced a new way of working. The study found that the pandemic forced the organisation to re-think the future of work at the municipality, and compelled it to automate certain manual processes. The millennials seemed to be grateful that the pandemic provided them the opportunity of flexible work. Although the fifth industrial revolution has begun in developed countries, this is not the case in Africa, particularly South Africa, which is not even ready for the fourth industrial revolution (Caga, Boadzo & Kwasi, 2020). It appears that South Africa does not have the resources, funding or a strategy to move towards the integration of the fourth industrial revolution into all government spheres (Manfred, Laszlo & Michael, 2020). In South Africa there is a significant shortage of the skills necessary to drive the fourth industrial revolution because of the poor education system and inadequate policy in relation to the impact that the fourth industrial revolution will have on cyber security (Mpungose, 2020). The Covid-19 pandemic has had both a negative and a positive impact in municipalities. The positive impact is that leaders have had to develop new strategies that incorporate the fourth industrial revolution; but the negative impact is that some municipalities have been found to be unable to manage the swift change presented by the pandemic due to their lack of preparedness for the fourth industrial revolution (Tshabalala & Beharry-Ramraj, 2021).

In the light of the above, the Ethekewini Municipality must consider the adoption of the transfortheentic leadership model to enable it to change the status quo of the organisation and begin implementation of a long-term strategy that includes millennials and the fourth industrial revolution.

7.11. The New Meaning of Leadership in the Era of the Fourth Industrial Revolution

The meaning of leadership has evolved due to the Covid-19 pandemic, with most leaders having to adapt to the new norm of managing and leading employees who work remotely. Most leaders in the public sector utilise transactional and authoritative leadership to monitor, manage and control the productivity of employees (Notanubun, 2021). The introduction of hybrid and remote working has limited the monitoring and managing of work and people in the workplace, particularly in the public sector which does not have the necessary systems in place to track productivity (Sadabadi & Mirzamani, 2021). The study found that millennials welcomed the opportunity to work remotely and not have their managers providing guidance at all times. This gave them an opportunity to strengthen their technology skills and learn to work independently. On the other hand, leaders have had to adapt to leading employees who are not on the premises where they can assess productivity. This situation requires leaders to adjust to using technology to remotely manage the performance, health and safety and emotional well-being of employees.

Therefore, it challenges the leaders to adapt to change and become receptive to the use of technology and the infusion of the fourth industrial revolution into their world. Leaders, especially those in public entities, are familiar with exerting their authority over their subordinates, but they need to accept change (Xu &

Tang, 2020). The challenge that leaders will encounter following the Covid-19 pandemic is the ability to lead independent and self-managed employees (Said & Riasat, 2019). In the case of the Ethekewini Municipality, where leaders have no experience of controlling employees and their productivity whilst working away from the workplace, the municipality will have to develop a leadership programme aimed at equipping leaders with skills to lead millennials post the Covid-19 pandemic. It is therefore evident that the Ethekewini Municipality must integrate the fourth industrial revolution into the workplace through the transformentic leadership model, specifically developed in this study to equip the leaders with the right skills to lead others in the era of the fourth industrial revolution.

7.12. Decision Making

In the study the leaders all held the same view that, in the hierarchy of the organisation, they are heads of departments, but they have little authority to make decisions on issues such as the integration of millennials and the fourth industrial revolution. The leaders further stated that all decisions of the municipality are subject to the approval of the municipal council which includes politicians. The general view was that the council comprises of various political parties who also have to support the initiatives of the municipality for the council to gain the majority vote for the approval of the strategies that the municipality will implement; therefore, their buy-in is needed. Thus, all decisions require endorsement at council level and the blessing of the trade unions. The leaders all agreed that the culture of the municipality is authoritative and transactional – it has a top-down approach to decision making. As a result, the organisation is not flexible and does not allow senior management to make decisions that may influence the strategy of the municipality. Clearly, senior leadership was frustrated that they do not have the authority to make decisions pertaining to strategy implementation without seeking approval at various levels. The leaders' shared opinion was that the lack of autonomy has resulted in their sticking to the status quo and not taking an interest in matters such as millennials and the fourth industrial revolution.

The public sectors in most African countries have an autocratic leadership approach, which is dictated mainly by politics (Adesina, 2019). It is no different in the Ethekewini Municipality, as is apparent from the finding that the top-down approach applied in the municipality is a barrier to leaders making a meaningful contribution to the organisation. They are compelled to focus on the direction given by the politicians, and have little time and few opportunities to invest in millennials and the fourth industrial revolution. Some of the leaders said that, although they occupy senior positions in the organisational hierarchy, they have to seek the approval of the City Manager for their decisions. In conclusion, it is clear that in the local government sphere developing countries such as South Africa are not prepared for the rapid technological advancements which are required to compete globally (Ichikowitz, 2017). The biggest obstacle in African countries has been the inability to move away from autocratic leadership and to empower public sector leaders to make strategic decisions without constant interference from external

stakeholders such as politicians (Lobel, 2016). The national governments in Africa must re-evaluate and strategise on how they can align to the fourth industrial revolution in order to provide services to the public more efficiently (Wang & Tao, 2019).

7.13. Attraction and Retention of Millennials in the Private and the Public Sectors

The study found that the general view was that the public sector cannot afford to millennials the same opportunities as those offered by the private sector. It emerged from the study that millennials are influenced by technology, and that an environment such as the municipality, with its red-tape culture, was not as conducive for millennials as the technologically savvy private sector. The study irrefutably showed that the millennials agreed (61%) that the fourth industrial revolution attracts millennials to an organisation. There was significant agreement that the fourth industrial revolution attracts and retains millennials, and that the fourth industrial revolution makes the workplace exciting and innovative for millennials. Millennials are attracted to join organisations that use technology to continuously adapt to the changing global trends presented by the fourth industrial revolution (Lobel, 2016). Rapid advancements in technology place a burden on the public sector to adapt to a world filled with the opportunities presented by the fourth industrial revolution (Turner & Zaichenko, 2018). Recognising this, public sector departments in African countries have begun to devise new strategies that are aligned to the fourth industrial revolution in order to attract the younger generation and its skills into the public sector (Hartmann & Hattingh, 2018). The private sector in most countries is ahead of the public sector in the utilisation of the fourth industrial revolution to enhance day-to-day business operations.

The private sector is likely to attract and retain millennials through the use of technology, the provision of new business solutions and the creation of workplaces that are agile and innovative (Chen, 2017). Some government departments in South Africa, such as the newly formed Department of Communications and Digital Technologies, have rebranded themselves as departments that champion the opportunities provided by the fourth industrial revolution (Marivate, Aghoghovwia, Ismail, Mahomed-Asmail & Steenhuisen, 2021). All spheres of the public sector can create new job opportunities by reskilling the country to champion projects inspired by technological advancements (Ferry & Guthey, 2021). In the public sector, functions such as health services, tourism, information technology, water services, and telecommunications can be enhanced if governments champion strategies that seek to find new solutions to problems whilst boosting economic growth (Houngbo, Coleman, Zweckhorst, De Cock Buning, Medenou & Bunders, 2017). If this approach is adopted, millennials will be more inclined to join and remain in the public sector, including local government.

7.14. Integration of Millennials

The findings of the study indicate that the Ethekewini Municipality is not ready to integrate millennials into the workplace. The responses to the statement ‘rate the readiness of the Ethekewini Municipality to integrate millennials in the workplace through the use of technology’ indicate that there is not significant agreement (40%) that the municipality is ready to integrate millennials through the use of technology. Some of the responses indicate that the municipality is moderately ready (22%) to integrate millennials into the workplace through the use of technology. These findings are corroborated by Huang & Rust (2018) who found that the public sector is not ready to include millennials in the workplace because of a lack of resources, planning and commitment from leaders. This is supported by Wood (2019) who found that millennials require a different leadership approach to integrate them into the public sector. In the study the leaders and millennials agreed that the municipality is not ready to integrate millennials due to lack of planning and unpreparedness to manage the changes required to fully integrate millennials.

7.15. Integration of the Fourth Industrial Revolution

The study found that the Ethekewini Municipality is not ready to integrate the fourth industrial revolution in the workplace. The responses to the statement ‘rate the readiness of the Ethekewini Municipality to integrate the fourth industrial revolution by using technology to streamline processes across the organisation’ indicate that there was not significant agreement (28%) that the municipality is ready. The responses indicate that the municipality is moderately ready (30%) to integrate the fourth industrial revolution into the workplace through the use of technology to streamline process. The participants seemed to suggest that there is a lack of communication within the municipality on the progress made by the organisation pertaining to the current and future plans on the integration of the fourth industrial revolution. Only some leaders were aware of the plans that the municipality wants to implement in the future to integrate the fourth industrial revolution. Research has found that the public sector in South Africa and other African countries has not accelerated the integration of the fourth industrial revolution because of high unemployment and the belief that the revolution will destroy jobs and create havoc in the sector (Costopoulou, Ntaliani & Ntalianis, 2021). However, the public sector needs to move faster in embracing the fourth industrial revolution in order to ensure that it becomes more efficient in managing processes and delivering services to communities (Huang, Rust & Maksimovic, 2019). Ayentimi & Burgess (2019) submit that the public sector, including local government, has been left behind by the rest of the world in relation to the integration of the fourth industrial revolution and the use of advanced technology. Mpongose (2020) supports the view that the fourth industrial revolution has evolved rapidly and robustly in economies in developed countries, but that African countries, including South Africa, have not been prepared for the revolution and its consequences.

7.16. Leadership and Management Development

It emerged from the data that leaders may require leadership development to effectively integrate millennials and the fourth industrial revolution. It was evident in the findings that the emergence of millennials and the fourth industrial revolution requires a different approach and a unique leadership style within the municipality. The results appear to indicate that the leaders are not trained or equipped to lead millennials and the fourth industrial revolution. As stated above, the culture of the organisation does not allow leaders to create an environment that is innovative and robust because of red-tape, bureaucracy and autocratic leadership. The results show that millennials and the leaders are in agreement that the leaders of the municipality require leadership development to create a working environment that is conducive for millennials and to develop a culture that encourages continuous learning and improvement. Millennials are a different generation to previous generations, and it is evident that they require understanding and patience and a different leadership approach (Govind, Singh, Garg & D'Silva, 2019). The findings further revealed that the Human Resource Department, the Ethekwini Municipal Academy and the Organisational Development Department have not been instrumental in developing programmes for leaders to be assisted in leading millennials and developing strategies to successfully integrate the fourth industrial revolution. Leaders are required to be at the forefront of transforming an organisation by ensuring that they constantly renew themselves and their skills to keep up with an ever-changing working environment (Miftari, 2018). The study confirmed that millennials share the view that leaders do not understand them as a generation and that the leaders require training to utilise the tools and opportunities presented by the fourth industrial revolution. The leaders in the public sector must adapt to a world with rapid technological advancements and take the lead in utilising the opportunities that the fourth industrial revolution presents to enhance the sector (Xu & Tang, 2020).

7.17. Change Management

The study found that the Ethekwini Municipality requires change management to effectively integrate millennials and the fourth industrial revolution. The findings further reveal that the municipality may require an extensive change management programme to transition from the current state to a future state that embraces the shift required to integrate millennials and the fourth industrial revolution. The study found that the leaders may have to go through a change management process to accept millennials as a generation and to acknowledge that the culture of the organisation must change to align to the current state across the world which is influenced by technology. It appears that the leaders themselves may still require time to embrace technology as an effective tool to conduct day-to-day operations. In developed countries the public sector has evolved, and the use of technology has been optimised to enhance service delivery to communities and to develop efficient systems that contribute to the effectiveness of the sector (Johnson,

2020). The findings show that millennials are ready for change, and they will accept the introduction of new systems and the enhancement of technology; however, this may be hindered by the resistance to change from leaders who may not readily adapt to change within the municipality. The study found that there may be a need for leaders to undergo training to adjust swiftly to the use of technology in the workplace. In developed countries the public sector has evolved, and the use of technology has been optimised to enhance service delivery to communities and to develop efficient systems that contribute to the effectiveness of the sector (Johnson, 2020). Leaders in developing countries may, however, take longer to adapt to the new workplace (Northouse, 2017).

7.18. Talent Management of Millennials

The findings of study show that millennials must be supported and nurtured in the organisation through an effective talent management programme. The leaders of the municipality in their responses revealed that millennials can make a meaningful contribution to the organisation and impart their knowledge on technology to the leaders. Leonardi & Neeley (2017) say that millennials require commitment, trust and patience from the leaders to enable them to soar within the organisation. Millennials thrive in a fast-paced and ever-changing working environment, and they need leaders who are able to keep up with them and are willing to serve and nurture them (Frankel, 2016). The study revealed that the municipality does not have a talent management programme to develop millennials to ensure that their full potential in the workplace is realised and utilised. Lan, Xia & Yang (2021) note that most organisations have not prepared the working environment for millennials, which contributes to clashes in personality, work ethic, values and work preferences. The fundamental aspect that organisations must focus on to integrate millennials in the workplace is the implementation of practical talent management programmes that measure the impact that millennials make on the organisation (Wood, 2019).

7.19. The Future of the Fourth Industrial Revolution

The results of this study have revealed that the leadership of the Ethekewini Municipality has not incorporated the fourth industrial revolution into the organisation's long-term strategic goals. The findings further revealed that, prior to the Covid-19 pandemic, the municipality did not have a clear understanding of how the technological advancements of the fourth and fifth industrial revolutions may disrupt the day-to-day operations of the organisation. The findings show that the leadership of the organisation only realised, once it was in the midst of the global pandemic, the importance of technology and aligning business processes to the fourth industrial revolution. Research conducted by the World Economic Forum (2019) predicted that in the year 2020 there would be specific skills sets required for future jobs which would lead to the redundancy of other jobs. The results of the study indicate that the opportunities of the fourth industrial revolution were only introduced by the municipality when work was disrupted by the pandemic.

The leaders of the municipality were forced to abandon the use of manual systems and make expeditious decisions to use technology to meet the demands of day-to-day operations. The fourth industrial revolution has improved the thinking of decision makers in the public sector and this will influence how all spheres of government plan for the future (Mpungose, 2020). The results show that leaders have a futuristic approach on how the integration of the fourth industrial revolution will impact the municipality. The fourth industrial revolution will not only disrupt industries, it will also disrupt the future of work in the public sector and will introduce automation, artificial intelligence and robotics (Jung, 2020). The arrival of the fourth industrial revolution in developing countries, particularly in the public sector, will propel all spheres of government to become innovative, thus creating more opportunities in the sector (Falcioni, 2016). The global Covid-19 pandemic has placed a tremendous burden on organisations such as the Ethekwini Municipality to respond to and manage unexpected change in the workplace. The study found that the organisation is not ready to integrate the fourth industrial revolution; and this view was corroborated by the emergence of the global pandemic.

The millennials who participated in the focus group strongly felt that the pandemic negatively affected the municipality's strategic planning and exposed its unpreparedness to deal with emergencies that affected business continuity. As mentioned earlier, the millennials all concurred that the organisation did not have a strategy in place to deal with having a large number of employees working remotely due to the national lockdown. The organisation lost revenue because it did not have the right tools, resources and equipment to deal with employees having to work remotely. The findings suggest that the Covid-19 pandemic propelled the municipality to utilise technology to conduct its day-to-day operations and introduced a new way of working with which the organisation was unfamiliar. The study found that the pandemic forced the organisation to re-think the methods of working at the municipality, and this has led to the automation of some manual processes. The millennials seemed to be grateful that the pandemic has provided them the opportunity of flexible work. Although the fifth industrial revolution has begun in developed countries, this is not the case in Africa. South Africa is not ready for the fourth industrial revolution (Caga, Boadzo & Kwasi, 2020), and does not have the resources, funding or a strategy to move towards the integration of the fourth industrial revolution in all government spheres (Manfred, Laszlo & Michael, 2020).

7.20. Leadership Styles

The study found that the Ethekwini Municipality requires a mixed leadership approach to integrate millennials and the fourth industrial revolution. The findings show that millennials prefer a leader who possesses attributes of an authentic leader that they can relate to interpersonally and also possess the skills and qualities of transformational leadership to fast track the integration of millennials and the fourth industrial revolution. The findings revealed that the leaders of the municipality shared the same view that one leadership style is not appropriate and that a mixed leadership approach should be adopted by the

municipality. The responses showed that millennials prefer transformational leadership in the workplace in order to integrate millennials and the fourth industrial revolution. The dilemma is that, in the public sector, leaders are expected to be servant leaders, primarily focused on serving the public (Giolito, Liden, van Dierendonck & Cheung, 2021). The Ethekewini Municipality operates within the local government sphere which is influenced by the Batho Pele principles enacted to ensure that public servants deliver exceptional customer service to the public (Masuku & Jili, 2019). The participants were given definitions of each leadership style to ensure that they had a clear understanding of the different leadership styles before responding to the questions. The results show that servant leadership was the form of leadership least preferred to integrate millennials and fourth industrial revolution. The low ranking of servant leadership may suggest that the leaders and millennials did not consider the importance of the core values outlined by the Batho Pele principles, which lean towards servant leadership to govern the public sector and set out the accountability of public servants to improve service delivery.

The findings further revealed that the municipality uses a transactional and autocratic leadership approach which gives less autonomy to leaders to make decisions on matters pertaining to millennials and the fourth industrial revolution. The outcome from the data collected was consistent among the participants and there seemed to be strong agreement that a mix of leadership styles is preferred for the Ethekewini Municipality. A mixed leadership approach in the public sector is common based on the situation leaders find themselves in and what is expected of them from a service delivery perspective (Wang, Zheng & Zhu, 2018). The study also found that the Ethekewini Municipality needs to adopt a mixed leadership approach to effectively integrate millennials and the fourth industrial revolution. It is on this basis that this study developed a transformentic leadership model as a tool to integrate millennials and the fourth industrial revolution into the Ethekewini Municipality.

7.21. Conclusion

The analysis of the quantitative and qualitative data presented the responses of the leaders and millennials with regard to the preferred leadership model to be adopted by the Ethekewini Municipality to effectively integrate millennials and the fourth industrial revolution. The responses that emerged from the data collected were analysed and presented graphically and thematically to provide a deeper understanding of the topic. The discussion emanated from the feedback received from the millennials using the Likert scale questionnaire, which formed the basis for the quantitative data. The responses received from the interviews and the focus group through the use of semi-structured interviews presented the analysis of the qualitative data. The study focused on answering the key research objectives and questions through the presentation of the data in a narrative format, with graphs, tables and figures.

The succeeding chapter provides a summary of all the chapters, makes recommendations on the key findings, presents the leadership model developed from the findings as well as the conclusion of the study.

CHAPTER EIGHT: RECOMMENDATIONS AND CONCLUSION

8.1. Introduction

This chapter presents the key findings, recommendations and conclusion of the study. The objective of the study was to develop a leadership model to effectively integrate millennials and the fourth industrial revolution into the Ethekwini Municipality. The study further aimed to explore the leadership style preferred by millennials that should be adopted to integrate millennials and the fourth industrial revolution. To answer the research questions and to explore and address the aims and objectives of the study, the researcher engaged the leaders of the municipality and the millennials. The study found that the municipality does not have a strategy to integrate millennials and the fourth industrial revolution. The study further found that there is a lack of commitment from the leaders to ensure that millennials are understood in the workplace as a generation and to optimise the opportunities of the fourth industrial revolution. Hence, it was evident that the municipality has not paid attention to the needs of the millennials in the workplace and that little has been done by the leaders to integrate the fourth industrial revolution to enhance the organisation. The study also found that the leaders did not have a common understanding of the fourth industrial revolution or whether the organisation was in the process of developing a strategy to integrate the revolution into various aspects of the organisation and to improve service delivery.

The study also aimed to explore the readiness of the municipality to integrate millennials and the fourth industrial revolution and to develop a leadership model to enhance the organisation through the effective integration of millennials and the fourth industrial revolution. The study found that the municipality does not have a leadership model to ensure that millennials and the fourth industrial revolution are utilised effectively in the organisation. Hence, it was apparent that the leaders require training to lead millennials and direct the organisation towards the use of technological solutions to enhance day-to-day operations and service delivery. The study found that there is a relationship between millennials and the fourth industrial revolution and that millennials must be embraced in the workplace to assist the leaders to normalise the use of technology. Therefore, the study recommends that the leadership of the municipality must embrace a mixed leadership approach to successfully integrate millennials into the workplace which, in turn, will lead to the advancement of the fourth industrial revolution.

8.2. Key Findings

8.2.1. The Importance of Understanding the Relationship between Millennials and the Fourth Industrial Revolution

The foundation of the study was to establish the leaders' understanding of millennials as a generation before progressing to the main objectives. The research objectives included determining the leadership

style required to lead millennials and the fourth industrial revolution, exploring the impact that the fourth industrial revolution has on attracting and retaining millennials, assessing the readiness of the municipality to embrace the opportunities and challenges presented by millennials and the fourth industrial revolution and developing a leadership model to integrate millennials and the fourth industrial revolution. It was important to establish the leaders' understanding of millennials as a basis to set the tone of the study. The findings indicate that leaders of the municipality do not understand millennials. The general view of the leaders was that, based on their observations, millennials are young people who are different from them. Although the municipality employs a large majority of millennials, it was apparent that the leaders had misconceptions about millennials, particularly with reference to their relationship to technology. Another misperception related to millennials' work ethic, preferences, behaviours and values. The leaders' observed that millennials rely heavily on the internet, and are as a result not able to apply their minds without making reference to Google. One the leaders said:

'I would say mostly, they are influenced by the fourth industrial revolution, but, uhm, I would be controversial and say they are technologically influenced because in everything they do they just want an easy way out.' (R15.)

The findings from the questionnaire show that millennials use the internet for work purposes. A significant number of the millennials (86.5%) indicated that they utilise the internet often or always for information. One of the leaders mentioned that they are frustrated because millennials are always on the internet and made a general statement that millennials are always on social media on their cellphones at work. A significant number of millennials (70.8%) prefer to use computers at work for information, compared to 26.0% who indicated that they use their cellphones for such information. The findings reveal that millennials use the internet at work mostly for research (44.8%). It seems that leaders have a general misconception of millennials and their relationship with the fourth industrial revolution.

Millennials, who are people who were born into the beginning of the fourth industrial revolution in the period of the 1980s to the 2000s, are a younger workforce which requires a different leadership approach to older employees (Costello & Westover, 2016). Millennials were born into the fourth industrial revolution and they naturally use the internet and technology as tools to get things done quickly and efficiently (Baier, 2018). Therefore, the leaders in the municipality must make an effort to understand millennials as a generation to be able to lead them effectively.

8.2.2. The Influence of the Fourth Industrial Revolution on Organisational Culture

A pertinent finding of the study relates to the influence of the fourth industrial revolution on the organisational culture of the municipality. One of the major barriers hindering the effective integration of millennials and the fourth industrial revolution is resistance to change, particularly the fear of embracing

advancements in technology. The findings show that millennials require a culture that promotes the use of technology to make business processes efficient. They also show that millennials significantly agree (95%) that technology is important to make organisational processes more efficient. However, it was evident from the results that technological progress is hindered by a red-tape culture and a lack of commitment to act swiftly on the integration of the fourth industrial revolution. This study has demonstrated that the fourth industrial revolution is influential in creating a workplace culture that is innovative and conducive for millennials. The findings of the study further revealed that the fourth industrial revolution has had an impact on the municipality since the start of the Covid-19 pandemic, which compelled the municipality to move away from the cumbersome manual systems that it relied on. The results show that, although the leaders were not prepared for the rapid changes, the use of technology has ushered in a culture that embraces the use of technology to conduct business.

It emerged from the findings that the leaders were not willing to accept that they were obligated to learn how to use electronic devices to hold meetings and provide services to communities. As a result, the question remains whether the leaders will continue to use the opportunities presented by the fourth industrial revolution beyond the Covid-19 pandemic. *Industry Week* (2018) describes the fourth industrial revolution as a robust technological intra-generational revolution which will bring about great opportunities and challenges to ordinary businesses. It is evident that the fourth industrial revolution has influenced the organisation positively; however, a change management process is required to assist with the integration of the fourth industrial revolution.

8.2.3. The Role of the Fourth Industrial Revolution in Enhancing Strategy Implementation

The study found that the opportunities generated by the fourth industrial revolution will play an important role in achieving the municipality's 2030 strategic objectives. The fourth industrial revolution will enhance strategy implementation and benefit the organisation immensely, although the municipality has been slow to integrate the fourth industrial revolution into the organisation. New technological advances will drive productivity and innovation in the public and private sectors (Doval, 2021). The results of the study revealed that the millennials agree (60%) that the use of technology enhances the strategic objective of the municipality. It was also revealed that the leaders believe that the municipality will in the future use the opportunities of the fourth industrial revolution to build a smart city, thus enabling it to compete with global economies. Leadership commitment will ensure that the use of technology in the municipality is prioritised. Therefore, a leadership model is required to escalate the integration of the fourth industrial revolution. Local government requires leaders who are responsive to the rapidly changing world of work (Austin, 2017). Local government in particular must adapt more quickly to the fourth industrial revolution in order to enable it to deliver services efficiently to the public (Baier, 2018). In addition, leaders must

become flexible in their approach and become receptive to the new world of work which will be dominated by technology (Lopate, 2019). The leaders in an organisation must educate themselves, must understand the impact of the fourth industrial revolution on their organisations and employees at all levels, and must recognise how the fourth industrial revolution is changing economies, societies and human environments (Bawany, 2017). The findings revealed that the integrated development plan of the municipality does not include the incorporation of the fourth industrial revolution to enhance the 2030 strategy. As a result, it was evident that the municipality was not yet ready to integrate the fourth industrial revolution. It is, therefore, argued that a leadership model is required to influence the decisions made by the politicians and top management of the municipality to guarantee the inclusion of the fourth industrial revolution.

8.2.4. The Impact of the Fourth Industrial Revolution on the Attraction and Retention of Millennials

The study established that the fourth industrial revolution has an impact of the attraction and retention of millennials in the organisation. The study found that millennials cannot be separated from the fourth industrial revolution. Millennials are identified as the younger workforce who were born at the beginning of the fourth industrial revolution and have a strong desire to work in organisations that promote the use of technology. Millennials are attracted by organisations that continuously improve technological resources to create working environments that are innovative and flexible (Arseven, 2018). Since millennials as a generation emerged during the rise of technology and are highly influenced by it, organisations need to adapt swiftly in order to retain them (Hoke & Chory, 2019). The findings of the study showed that the millennials in the municipality act with great momentum on projects that require them to use technology. It is argued that a new leadership approach is required in the municipality to set in motion a process to integrate millennials and the fourth industrial revolution. The view that millennials are regarded as the generation that has arrived to force leaders to adopt robust systems to create solutions to problems that make organisations less efficient (Kuron, Lyon, Schweitzer & Ng, 2015) is corroborated by the view that millennials possess the skills needed to enhance an organisation's efficiency through the introduction of technology that is innovative and leads to greater competitive advantage (Payton, 2019). Hence, it can be contended that the fourth industrial revolution will have an immense impact on the attraction and retention of millennials in the municipality.

8.2.5. A Leadership Model to Integrate Millennials and the Fourth Industrial Revolution

An eminent finding of this study is the importance of leadership on the integration of millennials and the fourth industrial revolution. The study found that the Ethekwini Municipality requires a mixed leadership approach to include millennials and the fourth industrial revolution. Consequently, there is a need to develop an appropriate leadership model to achieve this. The findings show that the municipality requires a combination of transformational and authentic leadership to effectively integrate millennials and the

fourth industrial revolution. Transformational leadership is known for its responsiveness to challenging situations and its ability to adapt to new variations, characteristics which are essential when employees and organisations are faced with increasing competition (Wang, Zheng & Zhu, 2018). This view is supported by Duan, Li, Xu & Wu (2017) who emphasise that transformational leadership has a substantial impact on the achievement of organisational outcomes. Hence, it is argued that the municipality requires the robust approach of a transformational leader in an environment that has a bureaucratic and transactional culture. Authentic leaders are well suited to deal with rapid changes and economic catastrophes that occur in the ever-changing business world (Liu, Cutcher & Grant, 2015). An authentic leader has a profound awareness of themselves, they demonstrate an inclination to act upon their core values whilst interacting transparently with those around them (Said & Riasat, 2019). Studies conducted on millennials found that they are attracted to leaders who are genuine and leaders who appreciate the contribution they make in an organisation (Oncioiu & Stanciu, 2017). Hence, an authentic leader is suitable to lead millennials who have been identified as a challenging generation to work with (Wood, 2019). Research has found that millennials ascribe to ethical values and are not afraid to speak up when something goes wrong; therefore, they require a leadership style that shares this attribute (Miglia, 2018).

A leadership model was developed and presented in Chapter Six which recommends that the Ethekewini Municipality should consider adopting a transforthetic leadership style. During the interviews the leaders expressed the opinion that the municipality will require a mixed leadership style to integrate millennials and the fourth industrial revolution based on their experience within the organisation and their observation of millennials in the workplace. A transforthetic leadership style was developed based on the qualities that the millennials require from a leader. The leaders of the municipality had varied views on the leadership style that may be appropriate, but they were in agreement that the leadership style had to include qualities of both transformational and authentic leadership, which were also the most preferred by the millennials. The leaders agreed that the municipality would need a different approach in the future as it does not have a culture that incorporates the robust and subtle leadership style required to lead millennials and drive the fourth industrial revolution. The leaders acknowledged that millennials require a leader who can balance being stern, progressive and modest. Austin (2017) says that millennials require a leader who can easily adapt to different situations yet still remain humble, flexible, adaptive and innovative. Avi & Livia (2019) argue that leaders in the future will be required to be versatile and must have cross-functional leadership skills. A mixed leadership approach is required for an organisation such as the Ethekewini Municipality which does not have an embedded organisational culture or a plan to integrate millennials and the fourth industrial revolution. The leadership model was also developed taking into consideration the work preferences and leadership styles that millennials respond to when they join an organisation. To successfully adopt a new leadership model the organisation should consider providing the leaders and

employees with an opportunity to undergo a change management process and training to get everyone to endorse the adoption of the recommended leadership model.

8.3. Recommendations

As discussed above, the municipality may consider the adoption of a transforthentic leadership approach to effectively facilitate the integration of millennials and the fourth industrial revolution. The need to adopt a mixed leadership approach through the implementation of transforthentic leadership to include millennials and the revolution was discussed in the study. Once the transforthentic leadership approach is adopted and developed, both executive and political leadership must be thoroughly trained on the leadership style in order to ensure their commitment to the inclusion of millennials and the fourth industrial revolution. The organisation will have to educate and train leaders to effectively implement transforthentic leadership. To successfully adopt a leadership that is inclusive of millennials and the fourth industrial revolution, the Ethekwini Municipality must implement the following recommendations.

8.3.1. Change Management Programme

The leaders must engage in a vigorous change management process to ensure the inclusion of millennials and the fourth industrial revolution at all occupational levels and departments. The findings revealed that the municipality has two key departments, Human Resource and Organisational Development and Change Management that can both assist with developing a robust change management programme to address the challenges the municipality faces relating to leadership, millennials and the fourth industrial revolution. Cilliers, Chinyamundi & Viljoen (2017) define the human resource department is the engine of an organisation tasked with ensuring that the organisation functions efficiently across departments and that business processes are aligned to global trends. Consequently, these departments have an obligation to ensure that the organisation develops strategies to successfully integrate millennials and the fourth industrial revolution. The study found that the key challenge to integration of millennials and the fourth industrial revolution was leaders' mindsets and their resistance to change, and that needs an effective change management process. The municipality requires a drastic change in the attitudes, unfounded perceptions, stereotypes and bias against millennials and the fourth industrial revolution. In particular, the change management process must create an awareness of the opportunities of investing in the fourth industrial revolution. The findings indicated that the employees of the municipality have become accustomed to working for a slow-paced organisation that relies on manual systems. The general view was that nothing will change in the municipality if the leaders do not change their attitudes towards the adoption of interventions such as automation to streamline processes. It was evident that politicians and trade unions share the view that the fourth industrial revolution will contribute to job losses, and this contributes to resistance to change. Tohidi & AlGeddawy (2019) asserts that change management is a

consultative process which involves the method an organisation uses to implement internal and external changes. To ensure cooperation with the change management process, the municipality must include a vigorous communication strategy to prepare and support the leaders to accept the change. This communication must involve a consultative approach with the senior leadership and politicians to ensure that there is synergy between the administration and the political leadership. The millennials and all departments must be involved in the change management process to make sure that the organisation does not continue to utilise outdated systems or processes which do not fit the current needs of the millennials. Additionally, millennials must be involved extensively in the consultation process to guarantee that they make a contribution to the formulation of the change management approach that will be adopted.

8.3.2. Training and Development

The study found that the older generation occupies the leadership positions within the organisation, and that they will probably resist any change from the current manual systems and processes to greater automation. Tschang & Almirall (2021) believes that the fourth industrial revolution will compel the older generation (baby boomers) to adapt to the use of technology in the workplace. Therefore, the Human Resource Department must ensure that leaders are trained on the transforthetic leadership model upon completion of the change management process across the organisation. Since the leaders associate the fourth industrial revolution with millennials and emphasise their comfort with the status quo, the municipality must utilise the Municipal Academy to reskill its leaders to use automated systems to enhance systems and processes to create an innovative working environment. The responses from the leaders revealed that the municipality does not have a uniform understanding of millennials and the fourth industrial revolution, which may contribute to their reticence to commit to the adoption of a leadership model to integrate millennials and the fourth industrial revolution. The municipal has an academy within the Human Capital Department whose mandate is to conduct research on the training and development needs the organisation to make certain that all employee and organisational requirements are aligned to the objectives of the municipality. It is recommended that the Municipal Academy must develop training manuals that define millennials and the fourth industrial revolution from an organisational perspective. Among the aims of establishing the academy was the desire to confirm that the organisation is in line with global trends.

It has been confirmed that the Ethekwini Municipality has not even begun the process of integrating millennials and the fourth industrial revolution, and the Municipal Academy, which has to date focused only on basic soft skills training, must initiate training and development interventions that will ensure that the municipality aligns itself with global trends, particularly the fourth industrial revolution. The research results show that there is a lack of understanding of millennials and the fourth industrial revolution by municipal leaders which does not reflect positively on their ability to adopt a turnaround plan for the

municipality. Therefore, the Human Resource Department needs to partner with the EtheKwini Municipal Academy to develop appropriate in-house training material. As mentioned, the EtheKwini Municipality is a highly unionised working environment, and the trade unions believe that the fourth industrial revolution is a threat to jobs. The leadership of the municipality must engage the trade unions on the integration of the fourth industrial revolution and millennials and persuade the unions to consider training on the subject. As mentioned above, the municipality requires individuals who can balance the needs of the organisation and employees. It appears that the municipality requires leaders who are able to drive the strategy of the organisation and who also possess leadership qualities that are nurturing and have a genuine yearning to help others. Hence, a transformational leadership approach is recommended to drive the strategy of the municipality towards the inclusion of millennials and the fourth industrial revolution.

8.3.3. Talent Management

The study found that the leaders' general view was that the EtheKwini Municipality, through the Human Capital Department, must assist its leaders with managing the talent of millennials through a talent management process designed specifically to address their needs. The municipality has an Organisational Development and Change Management Unit which specialises in talent management, and the leaders agreed that neither the Human Capital Department nor the Organisational Development and Change Management Department has developed programmes specifically targeted at the development and integration of millennials or ensuring that the organisation transitions towards the fourth industrial revolution. It was evident that the leaders recognised that millennials bring a different skill set to the municipality which is highly influenced by technology. The findings revealed that the leaders acknowledged that the municipality is not meeting the expectations of the millennials in the workplace, and that it is going to have to utilise the departments it has to manage their talents. The millennials were identified in the findings as a group in the workplace that is willing to learn and generate new ideas, which prompted the leaders to recommend that the municipality consider a vigorous talent management process to nurture their talents. Snow, Fjeldstad & Langer (2017) define talent management as a process to manage the competencies, skills and abilities of employees in an organisation. It emerged in the findings that one of the weaknesses of millennials is their impatience and desire to advance in their careers quickly without taking the time to gain the appropriate work experience.

As a result, the millennials aim to get into management positions prematurely without accumulating the experience to operate at that level (AlonsoAlmeida & Llach, 2018). When they are not promoted, millennials become frustrated and leave the municipality for the private sector (Culiberg & Mihelic, 2016). Therefore, it is recommended that the EtheKwini Municipality must adopt an integrated talent management process for millennials that is holistic and incorporates workforce planning, training, retention, leadership development, coaching, employee engagement, reward and recognition, diversity and inclusion as well as

employee wellness. This approach will enable the organisation to lay out a clear career path for millennials which will integrate them into the organisation. It is recommended that the municipality adopt the leadership model developed in this study to practically implement the integrated talent management process.

8.3.4. Leadership Development and Coaching

A leadership development programme is required in the municipality to train leaders responsible for inclusion of millennials and the fourth industrial revolution in the municipality. The senior leadership must develop and adopt a leadership development programme to ensure that leaders have the capability of handling the needs of millennials and managing the changes that will be presented by the fourth industrial revolution. The leadership development programme is aimed at enhancing each leader's capacity to effectively include millennials and promote the use of technology in their respective departments. The critical outcome of the leadership training is to prepare the leaders emotionally and psychologically to deal with the transition from the existing environment to a working environment which is conducive for millennials. Individual coaching as part of the leadership development programme is recommended to equip the leaders with the necessary skills to support and lead millennials. Coaching has been identified as a key component to develop an individual's leadership competence (Csath, 2018). The leadership development must include individual coaching to ensure that leaders are supported to increase their emotional intelligence through receiving continuous feedback. This will equip the leaders to acquire the ability to listen and to relate to others, both attributes appreciated by millennials in their leaders. It is important for the municipality to assign each leader with a coach with whom the leader can openly relate.

It is recommended that the municipality must make sure that the coach constantly monitors the leader to ensure that psychologically the leader will continue to commit to the integration of millennials and the fourth industrial revolution.

8.4. Summary of Chapters

Chapter One outlined the background of the study and presented an overview of the rationale and significance of the study, the problem statement and the contribution the study will make to existing theory. The research question and the objectives were presented, and lastly, the chapter provided a brief summary of the forthcoming chapters.

The theoretical framework in Chapter Two was important to explore the various theories pertaining to the emergence of generations that brought into being the millennial generation. The theoretical framework also provides a detailed overview of the earlier industrial revolutions that gave rise to the fourth industrial revolution, which now has a great impact on millennials in the workplace. The chapter discusses in detail how the fourth industrial revolution has impacted the relationship millennials have with technology. The

chapter further discusses the organisational evolution theory and institutional change to provide a foundation of how organisations evolve.

The literature review was explored in Chapter Three which provided an established theoretical overview of leadership, millennials and the fourth industrial revolution. This chapter explicitly discussed the concept of leadership and identified four leadership styles that are closely linked to the characteristics that millennials require from a leader. The literature review further explored millennials as a generation and their relationship with technology. The fourth industrial revolution was discussed extensively in this chapter and the theoretical underpinning that connects millennials and the revolution.

Chapter Four focused on research design and the various data collection tools used in the study to answer the research questions. The analysis and how data would be presented through the use of graphs, tables, pie charts and thematic analysis were set out. The chapter provided a brief overview of the sampling method used to select the sample that would participate in the study. Purposive sampling was used to identify fifteen (15) leaders who participated in the semi-structured interviews. Simple random sampling was used to select the millennials who participated in the study. A Likert scale questionnaire was sent to the millennials electronically for statistical analysis at a response rate of 85%. The measures the researcher considered to ensure reliability and validity were also discussed. A focus group was later introduced to the study because of the disruption in data collection from the questionnaire as a result of the Covid-19 pandemic. The focus group was used to gather data from the millennials pertaining to leadership, the integration of millennials and the fourth industrial revolution into the Ethekwini Municipality.

The interviews conducted with the leaders form the basis for Chapter Five, which is a detailed discussion of the responses received from the interviews with the leaders. This chapter provides a detailed summary of the interviews conducted with the leaders which gave an insight into the various aspects required to answer the research objectives. The interviews with the leaders were reported on extensively to ensure that the study was able to capture the crucial aspects relating to leadership, millennials and the fourth industrial revolution. The responses received from the interviews gave explicit insight into the real-life experiences leaders face on a daily basis in relation to the research topic. Thematic analysis was used to analyse the data collected from the interviews and coding was used to organise the data that was collected in a structured manner to discover the relationships that exist between the codes.

Chapter Six interprets the findings of the semi-structured interviews and the questionnaire. The quantitative findings were the views of the millennials on key aspects that relate to their work preferences, their relationship with the fourth industrial revolution and the leadership style they prefer in the workplace. The qualitative findings focused on the views that leaders have on millennials as a generation, the status of the fourth industrial revolution and leadership in the municipality. To analyse the results of the

quantitative data, tables and figures were used, themes and sub-themes that emerged from the interviews were used for qualitative data.

Chapter Seven provides a discussion of the key findings of the study and elaborates further on the data obtained from the questionnaire and the interviews. This chapter focuses on the findings that were identified as prominent in answering the research questions.

Chapter Eight is a summary of the key findings, provides recommendations that can be adopted by the municipality to integrate millennials and the fourth industrial revolution. The chapter further provides recommendations for future studies and lastly concludes the study. A leadership model that emanated from the key findings is recommended to the municipality which can be used to integrate millennials and the fourth industrial revolution. The study further makes a positive contribution to existing theory, in particular to the fourth industrial revolution which is an under-researched topic in South Africa.

8.5. Recommendations for Future Studies

Among the findings of the study was that the public sector is not appropriate to conduct studies that pertain to technology due to the culture of the sector across all spheres. There is limited data in the public sector pertaining to the fourth industrial revolution and its impact on the improvement of efficiencies in the public sector; similarly, in the Ethekewini Municipality there is limited data on the improvements made to the organisation as a result of the introduction of advanced technologies. Further to this, the fourth industrial revolution extends beyond merely the Internet of Things to autonomous robots, simulation, big data, additive manufacturing, augmented reality, cloud computing, cyber security and system integration. The researcher was unable to gather any data from the participants in their responses that the municipality has plans or strategies in place to integrate the other aspects of the fourth industrial revolution which can be used to create better efficiencies and improved service delivery. The public sector's primary mandate, being service delivery; hence, the focus is not on creating an innovative and agile working environment that is suitable for millennials with advanced technology. The participants struggled to provide adequate responses particularly on the opportunities and challenges of the fourth industrial revolution since the municipality was neither prepared nor ready to integrate the revolution into the workplace. The participants provided a futuristic view of the opportunities the revolution could have on the organisation, because the municipality had not yet experienced any challenges in this regard. The research established during the focus group discussion and interviews that prior to the Covid-19 pandemic, the organisation was not using electronic tools such as Microsoft Teams, Zoom, Google Meet, etc to conduct meetings. The responses received from the participants including participants who are involved operationally in the IT department of the municipality confirmed that the organisation was using manual systems to conduct day-to-day operations, for example, it still uses timesheets for attendance opposed to utilising a biometric

system that is integrated into the payroll system. However, the pandemic had a profound and immediate impact on the organisation during the lockdown which strained business operations and forced the senior leadership to consider the purchasing of electronic software for business continuity. This propelled the municipality into the fourth industrial revolution era. Therefore, future studies can focus on the preparedness of the municipality for the fourth industrial revolution post the Covid-19 pandemic. Further studies may conduct research using a mixed methods approach similar to this study to gain different views from leaders and employees not particularly millennials to assess the preparedness of the municipality for the fourth industrial revolution post the Covid-19 pandemic. The studies can also assess whether the municipality is prepared to implement the smart city in 2025 as stipulated in the current IDP. These studies can also assess whether the municipality has progressed or regressed from the initiatives the organisation implemented when it was propelled by the pandemic to integrate advanced technologies into the workplace. To assess the preparedness of the municipality for the future studies can assess whether the municipality post the pandemic will adopt a new culture driven by technology or whether it will regress.

This study has developed a new leadership model for the municipality to integrate millennials and the fourth industrial revolution and a new leadership style was introduced which needs further development in future studies. It appears that the world is now focusing on artificial intelligence and robotics which can be explored in future studies.

8.6. Answering the Research Objectives

The findings of the study indicate that the research objectives were answered by the researcher. As indicated in Chapter Seven, the findings show that the leaders and millennials shared a common view that the Ethekwini Municipality requires a mixed leadership approach. A leadership model was developed to integrate millennials and the fourth industrial revolution. A leadership style was established which is appropriate to lead millennials. It was established that the fourth industrial revolution has an impact on the attraction and retention of millennials in the Ethekwini Municipality. The study discovered that the Ethekwini Municipality is not ready to integrate millennials and the fourth industrial revolution. As a result, the municipality is not ready to embrace the opportunities and challenges presented by millennials and the fourth industrial revolution. A transformentic leadership model was developed and recommended to integrate millennials and the fourth industrial revolution. Consequently, the findings of the study have successfully answered the research objectives.

8.7. Contribution of the Study

Marivate, Aghoghovwia, Ismail, Mahomed-Asmail & Steenhuisen (2021) in their research state that literature on the fourth industrial revolution and millennials is limited, particularly in South Africa where the country has not embraced the fourth industrial revolution and does not have any policies that govern

the current and future prospects of the revolution. It appears that the fourth industrial revolution, particularly in South Africa, is under-researched; hence, this study has contributed to the expansion of existing theory. The study contributes to the awakening of the Ethekewini Municipality on the future of the world and the country which will be dominated by artificial intelligence, nanotechnologies, biotechnology, quantum technology, etc, and cannot be ignored. The study also demonstrated that the Covid-19 pandemic has already disturbed many industries, including the public sector, and has forced government departments to utilise technology to ensure business continuity. Hence, the study has contributed to providing solutions on how the country and the municipality can start planning for the transition to integrate the fourth industrial revolution. The study has demonstrated that millennials are not considered to be key human resource strategic tools that the public sector can utilise robustly to transition into the fourth industrial revolution.

The study has contributed to literature that has revealed how millennials can play a bigger role in the transformation of the Ethekewini Municipality and the public sector. The study has made a significant contribution to literature on leadership, millennials and the fourth industrial revolution. This research has developed a new leadership style that combines two leadership styles to integrate millennials and the fourth industrial revolution. The study contributed to knowledge on the leadership style preferred by millennials which has formed the basis for further exploration. This study can therefore be used as a reference by the public sector to effectively include millennials and the fourth industrial revolution. It is submitted that this study has potential applicability to other metropolitan municipalities as it appears that most institutions do not have strategies in place to integrate millennials and use technology to streamline systems and processes.

8.8. Limitations of the Study

The literature on the fourth industrial revolution and millennials is limited particularly in relation to the public sector in South Africa and the topic is woefully under-researched. The data collection method was interrupted (questionnaire) by the Covid-19 pandemic which led to the participants not being available to participate in the questionnaire as envisaged by the researcher; however, the statistical analysis confirmed that the number of participants who participated in the questionnaire were sufficient. A focus group was added which comprised of millennials to mitigate any limitations and ensure that the study is reliable and valid.

8.9. Conclusion

The implementation of the proposed recommendations and the adoption of a transforthentic leadership approach will assist the Ethekewini Municipality and the public sector to integrate millennials and the fourth industrial revolution into the workplace. This study has demonstrated that leadership impacts on

organisational culture and strategy implementation in an organisation. Therefore, the adoption of a mixed leadership approach such as transforthetic leadership can be influential to enhance the long-term strategic objectives of the Ethekwini Municipality.

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APPENDIX 1



05 May 2020

Mrs Carol Dianne Pearl Nxumalo (205521141)
Graduate School of Business & Leadership
Westville Campus

Dear Mrs Nxumalo,

Protocol reference number: HSS/2176/018D

Project title: Developing a leadership model to effectively integrate millennials and the 4th industrial revolution in the eThekweni Municipality

Approval Notification – Recertification Application

Your request for Recertification dated 04 May 2020 was received.

This letter confirms that you have been granted Recertification Approval for a period of one year from the date of this letter. This approval is based strictly on the research protocol submitted and approved in 2018.

Any alterations to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study must be reviewed and approved through the amendment /modification prior to its implementation. Please quote the above reference number for all queries relating to this study.

PLEASE NOTE: Research data should be securely stored in the school/department for a period of 5 years

All research conducted during the COVID-19 period must adhere to the national and UKZN guidelines.

HSSREC is registered with the South African National Research Ethics Council (REC-040414-040).

Yours sincerely,



Professor Dipane J Hlalele (Chair)

/dd


Cc Supervisor: Professor Cecile Gerwele and Dr Rosemary Sibanda

cc Dean & Head of School: Professor Ana Martins

cc School Administrator: Ms Zarina Bullyra

Humanities & Social Sciences Research Ethics Committee
UKZN Research Ethics Office Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Tel: +27 31 260 8350 / 4557 / 3587

Website: <http://research.ukzn.ac.za/Research-Ethics/>

Founding Campuses:  Edgewood  Howard College  Medical School  Pietermaritzburg  Westville

INSPIRING GREATNESS

APPENDIX 2



Pod 1, Second Floor, Intuthuko Junction, 750 Mary Thiphe Street, Umkhumbane, Cato Manor, Durban 4001.
Tel: 031 322 4513, Fax: 031 261 3405, Fax to email: 086 265 7160, Email: mile@durban.gov.za, Website:
www.mile.org.za

For attention:
Chair of Ethics Committee
College of Law and Management Studies
Graduate School of Business and Leadership
University of KwaZulu Natal
Westville Campus
Durban
4001

10 October 2018

RE: LETTER OF SUPPORT TO Ms C.D.P NXUMALO, STUDENT NUMBER 205521141- GRANTING PERMISSION TO USE ETHEKWINI MUNICIPALITY AS A CASE STUDY

The Human Resources Unit and eThekweni Municipal Academy (EMA), have considered a request from Ms Carol Dianne Pearl Nxumalo to use eThekweni Municipality as a research study site leading to the awarding of a Doctoral degree. The dissertation title is noted as *"DEVELOPING A LEADERSHIP MODEL TO EFFECTIVELY INTEGRATE MILLENIALS AND THE 4TH INDUSTRIAL REVOLUTION IN THE ETHEKWINI MUNICIPALITY"*.

We wish to inform you of the acceptance of her request and hereby assure her of our utmost cooperation towards achieving her academic goals; the outcome which we believe will help our municipality improve on its service delivery outcome. In return, we stipulate as conditional that she contacts Collin Pillay, Program Manager at MILE to present the results and recommendations of this study to the related unit/s on completion of her research study, accompanied by her academic supervisor.

Wishing Ms Nxumalo all the best in her studies.

Ms Kim Makhathini
Head: Corporate & Human Resources
eThekweni Municipality

Dr M. Ngubane
Head: eThekweni Municipal Academy
eThekweni Municipality

I Carol Nxumalo hereby accept as conditional that I will comply fully as per the conditions stipulated above.

Signed:

Date: 10/10/2018

APPENDIX 3

| |
|--------------------------------|
| Study Information Sheet |
|--------------------------------|

UNIVERSITY OF KWAZULU-NATAL

PhD-Law research Project

Researcher: Carol Nxumalo 0787722931

Supervisor: Prof Cecile Gerwel Proches 031 260 8318

Co-Supervisor: Dr Rosemary Sibanda 031 260 1419

Research Office: Ms Mariette Snyman 031 260 8350

Dear Participant,

I am Carol Nxumalo, a PhD student at the Graduate School of Business and Leadership at the University of KwaZulu- Natal. You are invited to participate in a research project entitled **‘Developing a leadership to effectively integrate millennials and the fourth industrial revolution in the Ethekwini Municipality’**.

The aim of the study is to develop a leadership model that can effectively integrate millennials and the fourth industrial revolution. Through your participation, I hope to understand the opportunities and challenges the Ethekwini Municipality faces pertaining to the integration of millennials and the fourth industrial revolution. Further to this the study aims to determine the readiness of the Ethekwini Municipality to integrate millennials and the fourth industrial revolution. The findings from the various data collection methods will contribute to the development of a leadership model to integrate millennials and the fourth industrial revolution.

Your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. There will be no monetary gain from participating in this survey/focus group. Confidentiality and anonymity of records identifying you as a participant will be maintained by the Graduate School of Business & Leadership, UKZN. The interviews should take you about **45 minutes** to complete. I hope you will take the time to participate in this study.

This study has been approved by the University of KwaZulu-Natal’s Human and Social Sciences Research Ethics Committee. The Protocol number is **HSS/2176/018D**. The Ethics Committee is committed to ensure no one is harmed as part of the research.

If you have questions about your rights as a research participant or any complaints, you can contact: Dr Shenuka Singh. 031 260 8350, snymanm@ukzn.ac.za

If you have any questions or concerns about participating in this study, you may contact me or my supervisor at the numbers listed below.

You will be given a copy of the informed consent form to keep.

Sincerely,

Researcher's signature_____

Date_____

This page is to be retained by participant

APPENDIX 4

Informed Consent Letter 3C

UNIVERSITY OF KWAZULU-NATAL GRADUATE SCHOOL OF BUSINESS AND LEADERSHIP

PhD Research Project
Researcher: Carol Nxumalo (0787722931)
Supervisors: Prof Cecile Gerwel Proches & Dr Rosemary Sibanda
(0312608318 / 0312601419)
Research Office: Ms P Ximba (0312603587)

Dear Respondent,

I, Carol Nxumalo am a PhD student, at the Graduate School of Business and Leadership, of the University of KwaZulu-Natal. You are invited to participate in a research project entitled: “*Developing a leadership model to effectively integrate millennials and the 4th industrial revolution in the Ethekewini Municipality*”. The aim of this study is to develop a leadership model to integrate millennials and the 4th industrial revolution into the Ethekewini Municipality.

Through your participation I hope to understand the appropriate leadership style that can be adopted to integrate millennials and the 4th industrial revolution in the Ethekewini Municipality, to explore the impact of the 4th industrial revolution on attracting and retaining millennials in the Ethekewini Municipality, to assess the readiness of the Ethekewini Municipality to embrace the opportunities and challenges presented by millennials and the 4th industrial revolution. The results of the interviews, focus group and questionnaires are intended to contribute to the study findings of developing a leadership model to integrate millennials and the 4th industrial revolution into the Ethekewini Municipality.

Your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. There will be no monetary gain from participating in this interview. Confidentiality and anonymity of records identifying you as a participant will be maintained by the Graduate School of Business and Leadership, UKZN.

If you have any questions or concerns about participating in the interview or completing the questionnaire, or about participating in this study, you may contact me or my supervisors at the numbers listed above. The interview should take about 45 minutes to an hour and the questionnaire about 10 minutes to complete. I hope you will take the time to participate.

Sincerely

Investigator's signature _____ Date _____

This page is to be retained by the participant

**UNIVERSITY OF KWAZULU-NATAL
GRADUATE SCHOOL OF BUSINESS AND LEADERSHIP**

**PhD Research Project
Researcher: Carol Nxumalo (0787722931)
Supervisors: Prof Cecile Gerwel Proches & Dr Rosemary Sibanda
(0312608318 / 0312601419)
Research Office: Ms P Ximba (0312603587)**

CONSENT

I.....(full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

I hereby consent/do not consent to record the interview.

SIGNATURE OF PARTICIPANT

DATE

.....

This page is to be retained by the researcher

APPENDIX 5

UNIVERSITY OF KWAZULU-NATAL GRADUATE SCHOOL OF BUSINESS AND LEADERSHIP

PhD Research Project
Researcher: Carol Nxumalo (0787722931)
Supervisors: Prof Cecile Gerwel Proches & Dr Rosemary Sibanda
(0312608318 / 0312601419)
Research Office: Ms P Ximba (0312603587)

Developing a leadership model to effectively integrate millennials and the 4th industrial revolution in the Ethekewini Municipality

Interview Questions

1. What is your position and role within the Ethekewini Municipality?
2. Can you elaborate on your leadership and management experience.
3. Have you heard of the term “millennials”? If so, please elaborate. (If no, provide brief overview).
4. How would you describe the presence of millennials in the Ethekewini Municipality?
5. Would you say millennials are different from the older generation? Please elaborate.
6. What are the challenges of working with or leading millennials?
7. What are the benefits of working with or leading millennials?
8. How can the Ethekewini Municipality best utilize millennials to benefit the organization?
9. In your opinion, have the leaders of the municipality prepared the working environment to integrate millennials? Please elaborate.
10. Have you heard of the term “4th industrial revolution”? If so, please elaborate. (If no, provide brief overview).
11. How does the 4th industrial revolution impact on the working environment, and specifically, the Ethekewini Municipality?
12. Would you say that millennials are influenced by the 4th industrial revolution, specifically with respect to the Ethekewini Municipality? Please elaborate.
13. How should millennials best be led in the 4th industrial revolution? Describe the traits, characteristics, and behaviours that leaders would require.
14. How will the 4th industrial revolution affect the attraction and retention of millennials in the Ethekewini Municipality?
15. What are the opportunities and challenges posed by millennials and the 4th industrial revolution?
16. In your opinion, is the Ethekewini Municipality ready to integrate the opportunities and challenges presented by millennials and the 4th industrial revolution? If so, how can the municipality integrate millennials and the 4th industrial revolution?
17. Do you think the integration of the 4th industrial revolution within the Ethekewini Municipality will enhance the long term strategic objectives of the organisation? If so, how?
18. Is there anything else that you would like to add?

APPENDIX 6

UNIVERSITY OF KWAZULU-NATAL GRADUATE SCHOOL OF BUSINESS AND LEADERSHIP

Doctor of Philosophy: Research Project

Researcher: Carol Nxumalo 0787722931)

Supervisor: Prof. Cecile Proches (031 260 8313)

Supervisor: Dr. Rosemary Sibanda (031 260 7934)

Research Office: Ms P Ximba 031-2603587

Questionnaire

The questionnaire seeks to explore the leadership style that can be adopted by the Ethekewini Municipality to effectively integrate millennials and the 4th industrial revolution in the Ethekewini Municipality.

Instructions

All the responses you will provide in this questionnaire are anonymous and will be kept confidential.

Please read through the terminology for your understanding to answer the questions.

This questionnaire will take approximately 15 minutes to complete.

Section A: Demographic Information

1. What is your age group? (Please tick (☑) one box as appropriate)

| | | |
|---|-------|--|
| 1 | 18-20 | |
| 2 | 21-23 | |
| 3 | 24-26 | |
| 4 | 27-29 | |
| 5 | 30-32 | |
| 6 | 33-35 | |

2. What is your Gender? (Please tick (☑) one box as appropriate)

| | | |
|---|--------|--|
| 1 | Female | |
| 2 | Male | |

3. Select your occupational level in the Ethekewini Municipality. (Please tick (☑) one box as appropriate)

| | | |
|---|-------------------------|--|
| 1 | Graduate | |
| 2 | Administrative/Clerical | |
| 3 | Junior Management | |
| 4 | Middle Management | |
| 5 | Senior Management | |
| 6 | Top Management | |
| | | |

4. Select the number of years you have worked for the Ethekewini Municipality

| | | |
|---|-------------|--|
| 1 | 0-1 years | |
| 2 | 1-2 yeas | |
| 3 | 2-3 years | |
| 4 | 3-4 years | |
| 5 | 4-5 years | |
| 6 | 5-6 years | |
| 7 | 6-and above | |

5. Select your highest qualification. (Please tick (☑) one box as appropriate)

| | | |
|---|-------------------|--|
| 1 | Matric | |
| 2 | National Diploma | |
| 3 | Bachelor's degree | |
| 4 | Honours Degree | |

| | | |
|---|-----------------------|--|
| 5 | Post graduate Diploma | |
| 6 | Masters | |
| 7 | PhD | |

6. Which cluster is applicable to you at the Ethekewini Municipality. (Please tick (☑) one box as appropriate)

| | | |
|----|-------------------------------------------------|--|
| 1 | Community and Emergency Services | |
| 2 | Corporate Human Resource | |
| 3 | Finance | |
| 4 | Governance & International Relations | |
| 5 | Economic Development & Planning | |
| 6 | Human settlements, Engineering & Transportation | |
| 7 | Strategic Management | |
| 8 | Trading Services | |
| 9 | Chief Operations | |
| 10 | Chief Audit | |

Section B: Assessing the utilisation of the 4th industrial revolution in the Ethekewini Municipality

Definition

4th industrial revolution

The industry week (2016) describes the 4th industrial revolution as a robust technological intra-generational revolution which will bring about great opportunities and challenges to ordinary businesses.

1. I have a fair understanding of the 4th industrial revolution

Strongly Agree Agree Neutral Disagree Strongly disagree

2. How often do you use the internet for information? Please circle one number (e.g. Always = 5)

| | | | | |
|--------|-------|-----------|--------|-------|
| Always | Often | Sometimes | Seldom | Never |
|--------|-------|-----------|--------|-------|

| | | | | |
|---|---|---|---|---|
| 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|

3. Which of the following do you prefer to get information from to use at work? Please tick (☑) one box as appropriate.

- Internet
- Newspaper
- Books
- Magazines

4. Do you prefer to use your cell phone or computer for information at work? Please tick (☑) one box as appropriate

- Cell phone
- Computer
- No preference

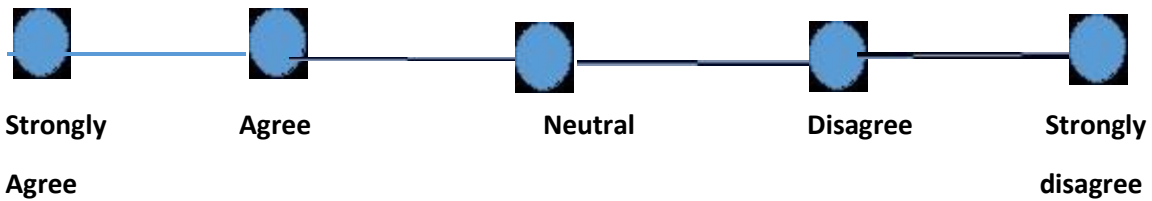
5. What do you use the internet for at work? Please tick (☑) one box as appropriate

- Research
- Electronic email
- Education and self-improvement
- Downloading work files
- Entertainment
- Enhancing knowledge to improve your current job

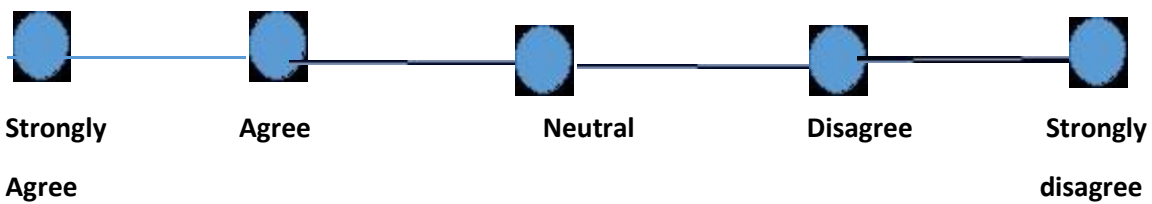
6. Technology is important in my organisation to make processes more efficient

Strongly Agree Agree Neutral Disagree Strongly disagree

7. The Ethekewini Municipality uses technology to enhance their strategic objectives



8. Most projects in the municipality are implemented using efficient computer software



SECTION C: Assessing the work preferences of millennials in the organisation

Definition

Millennials

Millennials are described as the younger generations who were born simultaneously with the emergence of the internet during the period of the 1980's and the 2000's (Joyce and Davis, 2016).

Please answer the questions below by placing an X in the boxes on the right hand side column based on the scale allocated below:

| | | | | |
|-----------------------|--------------|----------------|-----------------|--------------------------|
| Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
| 5 | 4 | 3 | 2 | 1 |

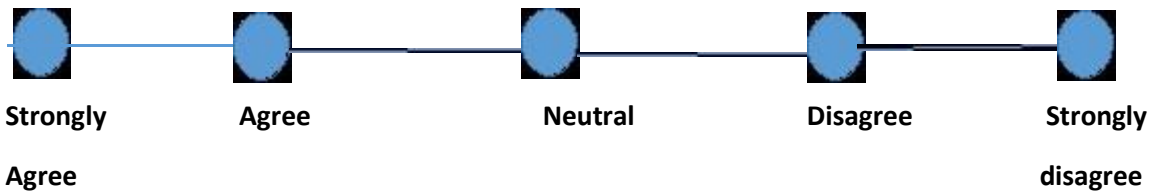
| | Work preferences of millennials | | | | | |
|---|------------------------------------------------------------|---|---|---|---|---|
| 1 | I understand the definition of a millennial | 1 | 2 | 3 | 4 | 5 |
| 2 | In my organisation leaders understand millennials | 1 | 2 | 3 | 4 | 5 |
| 3 | Millennials are different from the older generation | 1 | 2 | 3 | 4 | 5 |
| 4 | Leaders in my organisation are skilled to lead millennials | 1 | 2 | 3 | 4 | 5 |
| 5 | I am provided with opportunities for self-development | 1 | 2 | 3 | 4 | 5 |
| 6 | I am recognised and rewarded for good performance | 1 | 2 | 3 | 4 | 5 |

| | | | | | | |
|----|-----------------------------------------------------------------------------------------|---|---|---|---|---|
| 7 | I am given the opportunity to challenge the status quo and present new innovative ideas | 1 | 2 | 3 | 4 | 5 |
| 8 | I am encouraged to implement technological innovations in my department | 1 | 2 | 3 | 4 | 5 |
| 9 | My work preferences are taken into consideration | 1 | 2 | 3 | 4 | 5 |
| 10 | My work environment is flexible | 1 | 2 | 3 | 4 | 5 |
| 11 | I am supported by my manager to carry out my tasks | 1 | 2 | 3 | 4 | 5 |
| 12 | I feel that there is a good work life balance in my organisation | 1 | 2 | 3 | 4 | 5 |
| 13 | I am given the opportunity to solve complex problems in my organisation | 1 | 2 | 3 | 4 | 5 |
| 14 | I prefer to use the internet to find information relevant to my job | 1 | 2 | 3 | 4 | 5 |
| 15 | I feel that my manager engages me at work | 1 | 2 | 3 | 4 | 5 |
| 16 | There is open communication in my organisation | 1 | 2 | 3 | 4 | 5 |
| 17 | Information is shared open with everyone in the organisation | 1 | 2 | 3 | 4 | 5 |
| 18 | My manager is approachable and relatable | 1 | 2 | 3 | 4 | 5 |
| 19 | I can relate to my managers leadership style | 1 | 2 | 3 | 4 | 5 |
| 20 | My manager displays a strong set of values that are relatable | 1 | 2 | 3 | 4 | 5 |
| 21 | My organisation has a clear career path for my growth | 1 | 2 | 3 | 4 | 5 |
| 22 | I am aware of the organisational culture in my organisation | 1 | 2 | 3 | 4 | 5 |
| 23 | My organisation is prepared to integrate millennials into the workplace | 1 | 2 | 3 | 4 | 5 |
| 24 | There are various strategies put in place to attract millennials` | 1 | 2 | 3 | 4 | 5 |
| 25 | There are various strategies put in place to retain millennials | 1 | 2 | 3 | 4 | 5 |
| 26 | Technology has an impact on creating an innovative a working environment | 1 | 2 | 3 | 4 | 5 |
| 27 | Technology is used to make processes more efficient | 1 | 2 | 3 | 4 | 5 |
| 28 | I feel that my manager trusts me to lead projects | 1 | 2 | 3 | 4 | 5 |
| 29 | There is consistency and fairness across the organisation | 1 | 2 | 3 | 4 | 5 |
| 30 | The managers in my organisation display integrity all the time | 1 | 2 | 3 | 4 | 5 |
| 31 | My manager provides me with guidance and support to achieve my goals | 1 | 2 | 3 | 4 | 5 |
| 32 | I am given constant feedback on my performance | 1 | 2 | 3 | 4 | 5 |
| 33 | My ideas are listened to and implemented | 1 | 2 | 3 | 4 | 5 |
| 34 | My skills, experience and knowledge are fully utilised | 1 | 2 | 3 | 4 | 5 |
| 35 | I work in an organisation that upholds ethics | 1 | 2 | 3 | 4 | 5 |

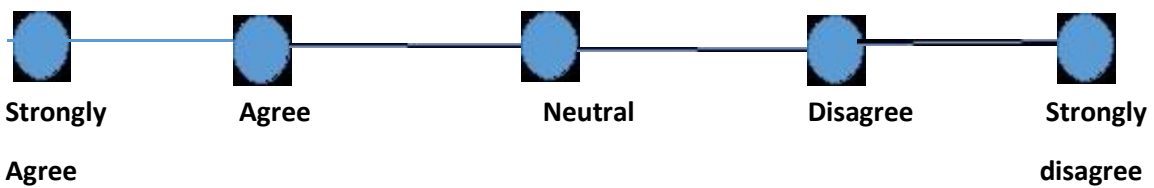
SECTION C: Assessing the Ethekwini Municipality's readiness to integrate the 4th industrial revolution

Please answer the questions below by placing an X in the boxes on the right hand side column based on the scale allocated below:

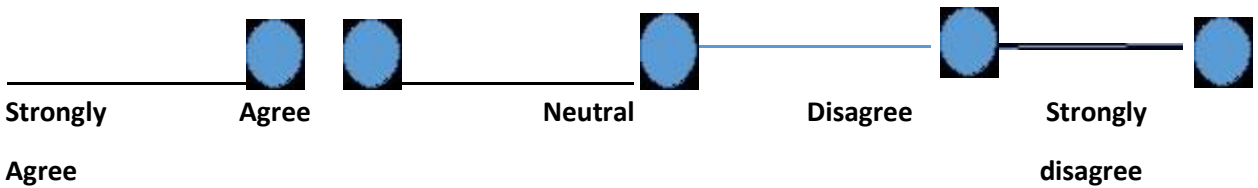
1. I have fair understanding of the term 4th industrial revolution.



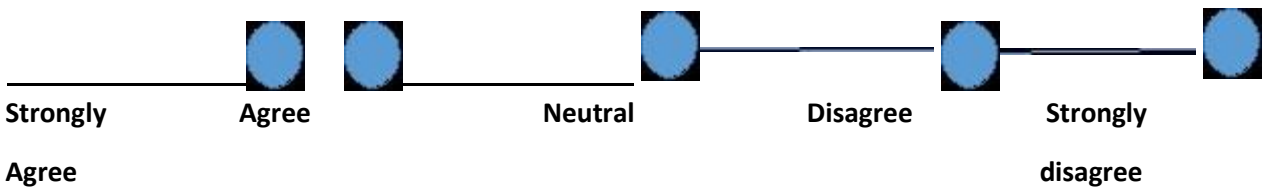
2. In my organisation electronic software is used to design efficient and effective process



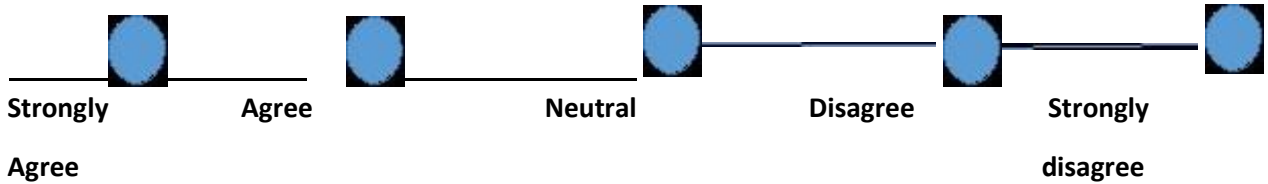
3. Manual systems and bureaucracy are a barrier in my organisation when conducting business



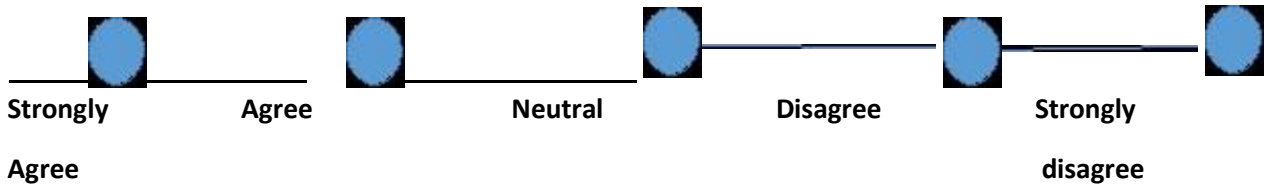
4. The 4th industrial revolution attracts millennials to join the organisation



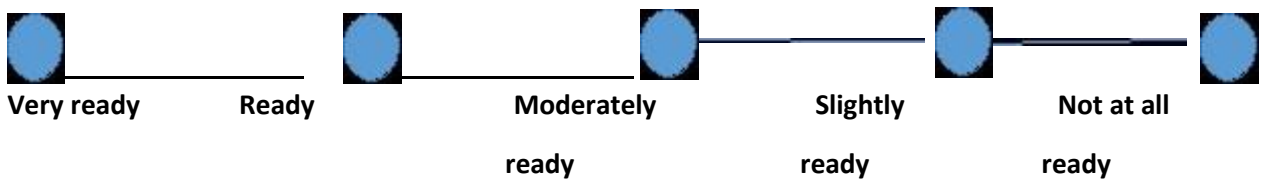
5. The 4th industrial revolution retains millennials in the organisation



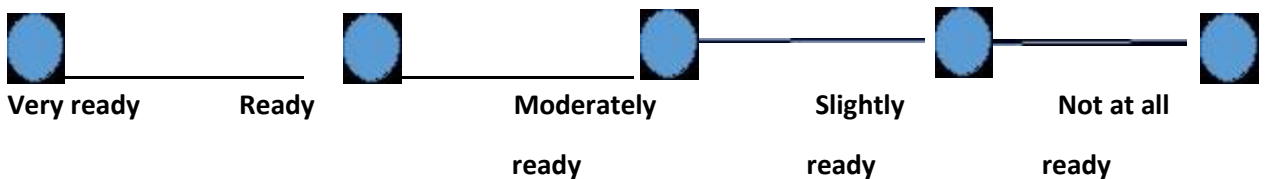
6. The 4th industrial revolution makes the workplace exciting and innovative for millennials to stay in the Ethekewini Municipality.



7. Rate the readiness of the Ethekewini Municipality to integrate the 4th industrial revolution by using technology to streamline processes across the organisation.



8. Rate the readiness of the Ethekewini Municipality to integrate millennials in the workplace through the use of technology.



Section D: Assessing millennials preferred leadership style

The purpose of these questions are to identify your preferred leadership style within the Ethekewini Municipality.

Terminology

Transformational leadership

Wang, Zheng and Zhu (2018) asserts that transformational leadership is known for its responsiveness to challenging situations and changing the status quo to adapt to new variations which is essential for employees and organisations when they are faced with increasing competition within industries.

Authentic leadership

Authentic leaders are described as individuals who influence the development of internal communication strategies which fosters transparency and build commitment that promotes the younger employees to participate in the organisation (Men and Stacks, 2014).

Servant leadership

The philosophy of servant leadership was developed by Greenleaf (1970) who found that in the organisational context three introductory themes described servant leadership; the servant leader, the institution as a servant and the trustees as servants. Greenleaf (1977) defines servant leadership as a way of life which originates from an innate sense of wanting to serve others.

Charismatic leadership

Jamal and Abu Bakar (2017) asserts that the primary function for charismatic leadership is create good communication activities that translate a shared vision at all levels in organisations.

Which leadership style do you think is needed in the EtheKwini Municipality is needed to integrate millennials in the EtheKwini Municipality.

Please indicate by ticking or crossing your responses

| Transformational Leadership | Authentic Leadership | Charismatic Leadership | Servant Leadership |
|-----------------------------|----------------------|------------------------|--------------------|
| 1 | 2 | 3 | 4 |

1. Which leadership style do you think is needed in the EtheKwini Municipality is needed to integrate the 4th industrial revolution in the EtheKwini Municipality.

| Transformational leadership | Authentic Leadership | Charismatic Leadership | Servant Leadership |
|-----------------------------|----------------------|------------------------|--------------------|
| 1 | 2 | 3 | 4 |

Please indicate how strong you agree or disagree to each statement by placing a circle from 1 (Strongly Disagree) to 5 (Strongly Agree), where:

| 1 | 2 | 3 | 4 | 5 |
|-------------------------------|---------------------|--------------------|------------------|----------------------------|
| Strongly Disagree (SD) | Disagree (D) | Neutral (N) | Agree (A) | Strongly Agree (SA) |

| Transformational Leadership | SD | D | N | A | SA |
|------------------------------------------------------------------------------------------------|-----------|----------|----------|----------|-----------|
| 1. Employees require a leader that provides strategic direction and communicates the strategy. | 1 | 2 | 3 | 4 | 5 |
| 2. In complex situations, leaders must allow employees to come up with solutions. | 1 | 2 | 3 | 4 | 5 |
| 3. A leader strives to continuously renew and revive the organisation. | 1 | 2 | 3 | 4 | 5 |
| 4. Leaders are required to stimulate their employees intellectually. | 1 | 2 | 3 | 4 | 5 |
| 5. A leader must be results driven. | 1 | 2 | 3 | 4 | 5 |
| 6. A leader has the responsibility to provide individual support to employees. | 1 | 2 | 3 | 4 | 5 |

| Servant Leadership | SD | D | N | A | SA |
|---------------------------------------------------------------------------------|-----------|----------|----------|----------|-----------|
| 1. It is important for leaders to be servants. | 1 | 2 | 3 | 4 | 5 |
| 2. In general, a leader must display humility. | 1 | 2 | 3 | 4 | 5 |
| 3. It is easy to relate to a leaders who listens to employees. | 1 | 2 | 3 | 4 | 5 |
| 4. Employees will naturally relate to a leader that shows compassion. | 1 | 2 | 3 | 4 | 5 |
| 5. Leadership requires empowerment and development. | 1 | 2 | 3 | 4 | 5 |
| 6. A leader must be aware of their actions and how their actions affect others. | 1 | 2 | 3 | 4 | 5 |

| Authentic Leadership | SD | D | N | A | SA |
|------------------------------------------------------------------------------------|-----------|----------|----------|----------|-----------|
| 1. Leaders must recognise and reward the achievements of their employees | 1 | 2 | 3 | 4 | 5 |
| 2. Employees are encouraged to be authentic and embrace their true self. | 1 | 2 | 3 | 4 | 5 |
| 3. Value systems are important for leaders. | 1 | 2 | 3 | 4 | 5 |
| 4. Ethics are an important in leadership. | 1 | 2 | 3 | 4 | 5 |
| 5. It is expected that a leader will conduct day to day operations with integrity. | 1 | 2 | 3 | 4 | 5 |
| 6. A consistent leader builds trust among employees. | 1 | 2 | 3 | 4 | 5 |

| Charismatic Leadership | SD | D | N | A | SA |
|----------------------------------------------------------------------------------------|-----------|----------|----------|----------|-----------|
| 1. Most employees appreciate leaders who communicate openly | 1 | 2 | 3 | 4 | 5 |
| 2. A leader must use persuasion to get employees to align to the organisations vision. | 1 | 2 | 3 | 4 | 5 |
| 3. Charisma is important for leaders to be easily approachable. | 1 | 2 | 3 | 4 | 5 |
| 4. In general, a leader who displays maturity gets employees to confide in them. | 1 | 2 | 3 | 4 | 5 |
| 5. A leader must display confidence in themselves and their employees. | 1 | 2 | 3 | 4 | 5 |
| 6. A leader who participates develops good relationships with employees. | 1 | 2 | 3 | 4 | 5 |

Thank you

APPENDIX 7

Focus Group Questions

1. How can the Ethekwini Municipality best utilize millennials to benefit the organization?
2. In your experience, would you say millennials are different from the older generation? Please elaborate.
3. In your opinion, have the leaders of the municipality prepared the working environment to integrate millennials?
4. In your opinion have the leaders of the municipality prepared the working environment to integrate the 4th industrial revolution?
5. How should millennials best be led in the 4th industrial revolution? Describe the traits, characteristics, and behaviours that leaders would require.
6. Does the 4th industrial revolution affect the attraction and retention of millennials in the Ethekwini Municipality?
7. In your opinion, is the Ethekwini Municipality ready to integrate the opportunities and challenges presented by millennials and the 4th industrial revolution? If so, how can the municipality integrate millennials and the 4th industrial revolution?

APPENDIX 8

Submission PhD

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Ewa Stańczyk-Hugiet. "Routines in the process of organizational evolution", Management, 2014

Publication

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