Effects of digital transformation on employee morale in the business banking department of a financial organization

by

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Abstract

Many organizations are undergoing digital transformation to remain competitive. Digital transformation in these organizations involves replacing old software with new software or automating manual processes. Organizations undergo this transformation without considering the effect on employees. This digital transformation process has a direct impact on employees. The study aimed to uncover the effects this transformation has on employee morale; the benefits of digital transformation and the strategies organizations should follow when implementing digital transformation. A quantitative study was conducted in the business banking division of a large financial services organization. The sampling technique used was stratified random. There was a total of fifty people that was sent a questionnaire within the business banking division of the financial services organisation. It was found that the benefits of digital transformation included streamlining of the operational process in the department, reducing manual activities, automating repetitive tasks, and minimizing errors. Respondents also showed positive results towards digital transformation increasing efficiency and allowing for more efficient data gathering and utilization of that data to gain valuable insights. Data from the questionnaire showed that employee morale increased with the introduction of digital transformation. Employees can do more meaningful work with the automation of tasks, thus doing more complex work and having a sense of accomplishment when complete. Digital transformation leads to increased motivation in employees with the desire to learn new skills and grow their career. Strategies needed to successfully implement digital transformation included training of employees on the new technologies to boost confidence and increase morale. Employees want to be included in the transformation process by providing inputs to decision-making. There needs to be clear and transparent communication from leaders during digital transformation. The data showed that employees require rewards while undergoing the transformation journey as this increases morale and allows adoption and culture shift to happen quickly. Lastly employees should be provided feedback regularly to show that their opinion matters, this increases morale. It is recommended that organizations embrace digital transformation totally and utilize the strategies identified in the study.

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Chapter 1 : Introduction

1.1. Introduction

This chapter highlights the importance of the study and the motivation behind it. It aims to provide reasoning as to why the study is import and set the context of the industry the study will be conducted in. Digital transformation is changing the way organizations conduct business and this has a direct impact on employees and their morale. In this chapter the research problem and objectives are stated and the need for the study is conveyed.

Digital transformation is redefining the way organisations operate across all the sectors of the economy. Established organisations of all forms and shapes are encouraged to transform their business models by leveraging digital technologies so that they remain competitive in their respective markets (Fitzgerald, Kruschwitz, Bonnet, Welch, 2014). Most organisations, including financial ones, have embraced digital technology for the purpose of increasing their values through innovation, invention, customer experience and efficiency. It should be noted that the fourth industrial revolution has arrived and if businesses do not embrace technological change they will be left behind, thus digital transformation by businesses is a must (Sovtech, 2019). Notwithstanding all the benefits that come with technology embracement, digital transformation is also capable of negatively affecting employees. It causes disruptions for employees because they then need to learn new technology skills and adapt to new ways of working. Additionally, the implementation of new technologies can cause job losses as some job positions become redundant. It is worth noting that the whole process of digitisation and the adoption of new technologies in organisations involve many changes, which require varied management capabilities and the design of new practices by human resource managers.

1.2. Background to the study

The effective implementation of digital transformation in organisations leads to operational excellence that will enhance the attainment of organizational goals. Most organizational goals are anchored sales, revenue, profitability, growth, and sustainability (David & David, 2014). On the other hand, the embracement of technology by organisations affects employee morale due to anxieties associated with having to learn new skills as well as fear of losing jobs. The financial sector in South Africa is large and sophisticated. The sector comprises of many institutions that are grouped under commercial, retail and merchant banking, mortgage lending,

insurance, and investment. It is regulated by Financial Sector Conduct Authority (FSCA). The study shall specifically focus on the business banking division of one of the largest financial services organizations in South Africa. Business banking is concerned with an organisation's financial dealings with an institution that provides products such as business loans, credit, savings accounts, and the checking of accounts, that are specifically designed for companies rather than for individuals (Schmidt, Drews, Schirmer, 2017).

The need for operational excellence and competitive advantage by these institutions attract the need to implement digital transformation. This transformation is beneficial to these institutions if it is implemented effectively. Failure to effectively implement digital transformation has negative consequences as employees can be demoralized. Jianguanglung and Singh (2017) asserted that high morale leads to improved employee performance and productivity. This entails that organisations should implement their programmes in a way that does not affect employee morale.

1.3. Context of the study

The study is conducted in the financial sector of South Africa where there are many institutions that include commercial, retail and merchant banking, mortgage lending, insurance, and investment. The research focuses particularly on the business banking department of a financial organization. Furthermore, the study is confined only to the business banking division where the financial institutions deal with companies rather than with individuals. The banking sector of South Africa is world renowned, and there are many local banks that are highly competitive. This financial sector is led by the five big banks that include Standard Bank, First National Bank (FNB), Amalgamated Bank of South Africa (ABSA), Capitec, and Nedbank.

The research, therefore, aims to contribute to the body of knowledge in terms of highlighting the effects of digital transformation on employee morale in the business banking division.

1.4. Motivation of the study

The study provides both theoretical and practical contributions. Most of the previous research projects have concentrated on investigating digital transformation and customer satisfaction in relation to cost saving for the company. Many other researchers have also researched on how technology increases productivity of bank employees owing to the advantages that are associated with digital transformation (Kazmi & Naaranoja, 2013). There has been limited research on the effects of digital transformation on employee morale. There is a need for

research on the impact of digitalization on employee morale in the business banking division. There is also a need to explore a sound digital transformation plan that will find ways of assisting employees impacted by this digital transformation process. This exploration will help managers to come up with effective management practices of the digital transformation process programmes that will lead to the reduction of fear, stress, and anxiety.

1.5. Research problem

Lewis (2015) postulated that a research problem is a brief and clear statement about the phenomena that is to be explored or investigated in each study. Kazmi and Naaranoja (2013), suggested that to drive better digital transformation and adoption, employees should be fully involved in the process. The reason for employee involvement is because these transformation processes bring about uncertainty and increase stress levels of employees as jobs could be lost. This will then ultimately lead to low morale and resistance to these digital transformational changes by bank employees.

The problem at hand is therefore 'the lack of effective management of the digital transformation process by financial services organizations in the business banking division there-by affecting employee morale.

1.6. Aim of the study

The aim of this research is to investigate the effects of digital transformation on employee morale in business banking division of an organization. This investigation will provide solutions to the research problem that reads, 'lack of effective management of the digital transformation process by financial services organizations in the business banking division affects employee morale'.

1.7. Research objectives

The research objectives of this study are outlined below:

- To understand the benefits of digital transformation for the business banking division of a financial services organization.
- To determine how digital transformation affects the morale of employees in the business banking division of a financial services organization.
- To determine the strategies that financial services organizations should use to address employee morale issues during digital transformation in the business banking division.

1.8. Research questions

The research questions of this study are outlined below.

- What are the benefits of digital transformation for the business banking division of a financial services organization?
- How does digital transformation affect the morale of employees in business banking division of a financial services organization?
- What strategies should financial services organizations use to address employee morale issues during digital transformation in the business banking division?

1.9. The significance of the study

There are three ways in which this quantitative study is significant to various stakeholders.

Firstly, the study is significant as it identifies the morale challenges that are brought about by the implementation of digital transformation in the business banking division of a financial services organization. The findings of this study will therefore go a long way towards assisting managers with better ways of digitalizing the banking division while at the same time employee morale is not affected.

Secondly, this study is significant to human resource practitioners as well as technology implementers to understand how employees can be involved and get trained on how to use technology in their departments. This reduces the resistance and anxiety associated with the acceptance of new technology. Furthermore, this study draws from the Technology Acceptance Management Theory (TAM) and the reflective thinking theory which according to the author's knowledge, have not been applied before to study of digital transformation in the business banking divisions of financial services organisations.

Lastly, the findings from this study will add to the existing body of knowledge and ongoing conversation among employees on issues of digital transformation effects. The research will help managers in financial organisations to come up with implementation plans that do not affect employee morale.

1.10. Delimitation of the study

To make the research study more manageable the delimitations helped in narrowing the scope of the study. Delimitations can be described as the characteristics that limit the scope and define

the boundaries of a research study (Simon, 2010). The following are the delimitation aspects of this study:

- The study is confined to employees in the business banking division of a bank in South Africa. Employees in other divisions are excluded.
- The study used convenience sampling technique. Although this method is good as it selects respondents with knowledge regarding the subject matter, the results it generates cannot be generalised to employees of all banks in all the provinces of South Africa.

1.11. Chapter outline

The structure for this study is outlined in the following manner.

Chapter One: Overview of the study

This chapter introduces the research study. The background to the study is discussed and includes the effects of digital transformation on employee morale in the business banking division of a bank. The research objectives and research questions are outlined. The significance of the study describes how the study will be beneficial to different stakeholders. The research methodology is outlined, and the delimitations of the study has been explained.

Chapter Two: Literature review

This chapter provides a review of literature on the concepts of digital transformation and its effects on employees in the business banking division of a financial services organisation.

Chapter Three: Research Methodology

This chapter outlines the details of the research design and the research methods which were used for this study. In this chapter, research paradigms, research philosophy, research design, the research approach, research methodology, research strategies, time frames, target population, sampling techniques, data collection methods, pre-testing of the questionnaire, method used for data analysis, variables which test the research quality and ethical considerations were discussed.

Chapter Four: Research findings

Thematic analysis had been used to analyse the patterns within the data. Factor analysis was utilised to establish the relationship between variables.

Chapter Five: Discussion

The variables that were identified in Chapter Four were discussed in relation to the literature review in Chapter Two. The aim of this chapter was to ensure that the research objectives are answered.

Chapter Six: Conclusions and recommendations

The overview of the study and summary of the findings have been presented in this chapter. Conclusions of the research study have been drawn based on the findings. Recommendations have been proposed based on the research findings. Implications of the study and areas for future research have been discussed.

1.12. Summary

The chapter has introduced the quantitative study that has focused on the effects of digital transformation on employee morale in the business banking division of a financial institution. The introduction section of this study has provided a background of the study, the motivation of the study, the research problem, research objectives and the research questions. The chapter went on to outline the significance of the study, the research methodology, delimitations of the study and the chapter outline. The next chapter focuses on the literature review in which existing literature on digital transformation effects are explored.

Chapter 2 : Digital transformation and employee morale

2.1. Introduction

This chapter addresses the research challenge by examining several aspects of digital transformation. Great care is made to examine and convey facts within the body of knowledge relevant to it in a methodical manner. According to Webster and Watson (2002), a literature review involves examining and analysing the literature that is relevant to addressing a research issue. According to Paul and Criado (2020), the literature review critically analyses the specific research area based on relevant theories, key constructs and considering past research and gaps still existing.

2.2. Theoretical framework

2.2.1. Maslow's hierarchy of needs

The purpose of this research was to investigate the effects of digital transformation on employee morale in a financial institution's business banking department. Reference was made to Maslow's hierarchy of needs into the dynamics of organisational change, employee morale, and the issues faced by digital transformation.

The concept was first introduced by Abraham Maslow in his paper titled "the theory of human motivation". And again, in his book titled "motivation and personality" (Cherry, 2022). Maslow's hierarchy of needs is a motivational theory that is often depicted in a five-tier model in a pyramid. These five tiers describe human needs. Figure 2.1 depicts the pyramid with the five levels of needs.

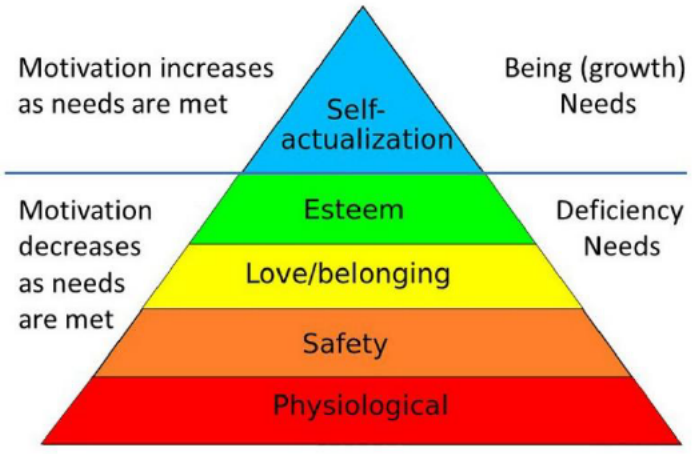

Figure 2. 1: Marslow's hierarchy of needs (McLeod, 2018)

Maslow (1943) stated that people are motivated to ensure that certain needs are met and as a result some needs will be considered more important than others.

Physiological needs are the most basic need for survival and can include air, food, water, shelter, warmth, and sleep (Maslow, 1987). Safety needs entail protection from elements, security, order, law, stability, and freedom from fear. The 3rd level is love and belongingness which involves the need for interpersonal relationships and motivates behaviour these include friendship, intimacy, trust giving and receiving love. Next is the esteem needs which Maslow gave two categories which are the esteem for oneself. This includes dignity, achievement, mastery and independence (Maslow, 1987). The other category being the desire for reputation or respect from others and this includes status and prestige. The final level on the hierarchy is self-actualization needs. This involves realizing personal potential, self-fulfilment, seeking personal growth and peak experiences (Maslow, 1987).

Maslow refined his theory over several decades from the 1940's to the 1980's (McLeod, 2018). Maslow (1987) found that the order of the hierarchy is not entirely rigid as he had described in earlier publishing's. he noted that the order can vary based on external circumstances and individual differences. Some individuals could value self-esteem more than they value love. Maslow (1987) also showed that most behaviour is multi-motivated and he noted that any behaviour tends to be determined by several or all basic needs rather than by only one of them.

When applying Maslow's theory to industry a basic but implicit assumption is made. Employees believe that they can satisfy their needs both at their work and through their work (Barling, 1977).

Digital transformation causes change in the organization and the need for employees to adopt these changes. This requires motivation from the employees and Maslow's hierarchy of needs applies to employees desire to adopt digital transformation and how it may affect them.

2.2.2. Technology acceptance model (TAM)

The Technology Adoption Model (TAM), which was initially developed by Davis in the late 1980s, proposes that the acceptance of new technology can be predicted based on the users' behavioural intention (BI), attitude towards technology use (A), and internalised beliefs, in particular perceived utility (U) and perceived ease of use (E) (Davis, 1985). According to WU et al (2010), this model has received widespread recognition as being valid for forecasting

whether a technology would be adopted. Subsequent research investigations have validated the applicability of TAM to a wide range of people as well as many categories and varieties of technology and created the unified theory of acceptance and use of technology (Venkatesh, et al., 2003).

While perceived usefulness refers to the amount to which users feel that their job performance will increase via the use of technology, perceived ease of use refers to the degree to which users believe that using the technology will not present any difficulties for them (Davis, 1985). According to Davis (1986), behavioural intention is a critical aspect that plays a role in the acceptance and actual utilisation of new technology. This is because behavioural intention shows how humans are likely to behave. This research will make use of the original TAM model because of its well-established reliability and validity in identifying determinants of human behaviour linked to technology adoption (Farahat, 2012). This decision was made since the original TAM model would be used.

Scherer, Siddique and Tondeur (2019) had shown that empirical research evaluating the predictive value of TAM for technology adoption in the military and aerospace industries has showed positive findings. TAM has been continually improved by the incorporation of additional components and the modification of linkages to consider a variety of scenarios. The TAM theoretical model is made up of a variety of different individual constructs, with the external variables (EV) being the most important part of the model. According to Lee, Xiong, and Hu (2012), the components that make up EV include demographic factors, perceived utility (U), perceived ease of use (EoU), attitudes towards using (A), behavioural intention to use (BI), and actual system utilisation.

The TAM makes its predictions based on the assumption that there is a causal chain connecting the various dimensions. The propensity of users to accept new technology is influenced by both their views of the advantages of the technology and their attitudes towards it (Davis, 1985). The users' perceptions of the usability and usefulness of the technology have a favourable impact on their attitudes towards using the technology, which in turn influences their attitudes towards utilising the technology (Davis, 1985). According to Schroff, Orth and Busch (2011), consumers' perceptions of the utility of a particular technology are greatly impacted by the degree to which they find it easy to use. As digital transformation is the use of the latest technologies in an organization, the TAM is an ideal model that considers employees' perception of the new technology and their attitude towards it which relates to morale.

2.3. Fourth industrial revolution overview

Digital transformation is a key component of the ongoing Fourth Industrial Revolution (4IR), characterized by the convergence of technology across physical, digital, and biological domains (Schwab, 2016). The 4IR is marked by rapid advancements in emergent technologies, resulting in deep upheaval in economic systems and social structures (Schwab, 2016). These technological advancements have been witnessed in various industrial revolutions throughout history.

The First Industrial Revolution was driven by steam power, while the Second Industrial Revolution saw the emergence of electricity as the primary driving force (Schwab, 2016)The Third Industrial Revolution witnessed the development of semiconductors, computers, and the internet, enabling the streamlining of manufacturing processes through lean production (Schwab, 2016).

Currently, we find ourselves in the early stages of the fourth digital revolution, often referred to as Industry 4.0 (Schwab, 2016). This revolution is characterized by unprecedented development and an exponential pace of change, distinct from previous revolutions (Oosthuizen, 2022). Oosthuizen (2022) stated that smart technology and artificial intelligence brought about by the 4th industrial revolution will displace as much as a third of jobs that are currently available. It is crucial to embrace the technologies that are being developed at an exponential pace.

The complexity of the 4IR lies in the convergence of technology across physical, digital, and biological realms, transforming not only what and how we do things but also shaping our identities and interpersonal interactions (Schwab, 2016). These technological advancements contribute to a wide range of emotions and contradictory feelings as we navigate through changing patterns of behaviour, attitudes, and beliefs (Schwab, 2016).

The 4th industrial revolution brings about new technologies that take the inventions of the past to a new realm of possibility (Mckinsey & Company, 2022). Artificial intelligence could displace as much as 50% of jobs (Mckinsey & Company, 2022). Technologies that are advancing include blockchain which will revolutionize how payments are made and what money is, machine learning and artificial intelligence which will touch all industries and advance research (Mckinsey & Company, 2022).

It has been observed that technological breakthroughs such as digitalization, automation, robotics, and artificial intelligence have drastically altered the working environment in recent decades. Labour that was formerly done by humans has been replaced by automations, who can carry out their obligations significantly more efficiently (Holzer, 2022). It is expected that this trend will continue to grow over time, with machine learning, artificial intelligence, and robotics already starting to replace white-collar jobs formerly held by humans (Ford, 2015).

Africa has not achieved as much advancement compared to the rest of the world when it comes to digital transformation; it has, however, advanced in information and communication technology (Schwab, 2016). The use of mobile technology has played a crucial role in job creation in Africa. The 4th industrial revolution provides Africa with the potential to compete on a global scale if technologies are adopted swiftly (Schwab, 2016).

2.4. 4IR in South Africa and its challenges

The deterioration of South Africa's economy has made it much more difficult for the government to address the underlying issues of high unemployment, widespread poverty, and widening economic disparities. These difficulties have persisted for a long time. However, there is one more element that South Africa must prepare for to prevent future development of social inequality which is the 4th industrial revolution (Naude, 2016). As previously stated, the rapid advancement of game-changing digital technologies has made the Fourth Industrial Revolution, often known as Industry 4.0, a feasible prospect. The fast development of game-changing digital technology has enabled these possibilities. Recognising the importance of this issue, South African President Cyril Ramaphosa said in his State of the Nation address at the beginning of 2019 that a Digital Industrial Revolution Commission will be established to investigate the 4IR (Ramaphosa, 2019).

In South Africa there are key challenges with embracing new technologies at a rapid speed due to lack of skills, capacity of training institutions is inadequate, technologies are very expensive and there is this negative perception that technology brings about job losses (Musonda, Malomane, Okoro, 2022). South Africa is one of the countries in the world that has not yet fully taken advantage of digital transformation to improve the economy (Nhede, Mazenda, Masiya, 2022).

As the number of firms wanting to enjoy the benefits of artificial intelligence (AI) grows throughout the globe, there is a tremendous growth in the need for professionals with experience in data science and advanced analytics. The demand for persons with digital skills

in South Africa is significantly larger than the supply of such people, resulting in an unusually severe skills gap in this sector. South Africa was placed 60th out of 63 economies in the Institute for Management Development's (IMD) 2022 World Competitiveness Yearbook, the lowest position for the nation since the yearbook's creation. This is South Africa's lowest rating since the yearbook was first produced (IMD world competitiveness center, 2022).

According to Deloitte (2020) only 24% of c-suite executives believe that South African graduates have the necessary digital skills to succeed in the workplace. Overall, it was determined that its main deficiencies were in the areas of digital and technological abilities, as well as the acquisition of higher education (Deloitte, 2020). For South Africa's economy to compete on a global scale, the country must first establish an economy that provides its people with the necessary skills to be future-ready. Only then will South Africa's economy be able to compete.

2.5. Digital transformation

The term digital transformation has been used for quite some time without fully understanding what it entails (Vial, 2019). Digital transformation has dramatically changed how businesses are run and the speed of operations for the foreseeable future (Reis & Meloa, 2023). As a result, there are many definitions of digital transformation and what it essentially means.

Digitization and digital transformation should not be taken to mean the same thing (Reis, Amorim, Matos, Meloa, 2018). Digitization is about transforming manual processes into digital ones and converting analogue data into digital sets (Loske & Klumpp, 2022).

Digital transformation is the use of new technologies to enable business model transformation by using the smart and analytical technologies that facilitate business improvements like improved customer experience and streamlined operations (Fitzgerald, et al., 2014). Digital transformation can be attributed to organizations utilizing the most advanced technologies brought about by the 4th industrial revolution, these technologies include applications on a mobile phone, moving information technology to the cloud, social media and the connectedness of smart devices known as the internet of things (Parise, Guinan, Kafka, 2016).

Matt, Hess and Benlian (2015) suggested that digital transformation should be looked at as a digital strategy that governs how a company will embrace digital technology and sets the plan in motion for what is expected. Piccinni, Hanelt, Gregory and Kolbe (2015) agreed with the embracing of digital technologies but adds that digital transformation of business processes

should always be implemented to improve customer experience and enhance operations of the organization.

Other authors look at digital transformation as purely digitizing business offering. Horlach, Drews, Schirmer and Bohmann (2017) suggested that when company sales are done via digital means and all products are offered to customers via digital technologies then this is considered digital transformation. He also finds that when companies use data to make decisions that generate new revenue streams from digital technology then this is digital transformation (Horlach, et al., 2017).

Krasonikolakis and Tsarbopoulos (2020) referred to digital transformation as not only the use of the latest technologies to transform a business, but they also state that digital transformation encompasses the entire technological process of a business from the initial capital investment for the technology and the risks associated with that to the uncertainty of whether the use of the technology will succeed. They also say that digital transformation causes disruption and transformation in the entire organizations operating model and the culture driven by individuals that are part of it.

When old organizations undergo a digital transformation, they adopt new technologies. One of the key elements of a successful transformation is when these organizations use social, mobile, analytics, cloud, and the internet of things (SMACIT) in their normal business operations which also enable faster customer service (Sebastian, et al., 2021).

The use of digital technologies gives organizations a competitive advantage and this leads to better engagements with customers which increases customer loyalty, it also improves the efficiency of processes within the business that reduces cost of operations, and it changes the business model of the organization (Tekic & Dmitry, 2019).

It is critical to recognise that digital transformation is a long-term strategy that lays the way for future opportunities for all sorts of businesses, because it entails more than simply the use of technology, it is a long-term process of continuous change (Westerman, Bonnet, McAfee, 2014). This is since it entails more than simply the adoption of technology (Tekic & Dmitry, 2019).

When digital transformation occurs in an organization these new initiatives need to be run as projects with clear outcomes and are vital for the success in this transformation process (Westerman, et al., 2014). With the initiatives being run for digital transformation the business

analyst role becomes extremely important as they ensure that the utilization of the new technology meets business requirements (Westerman, et al., 2014).

2.6. Digital transformation and organisational performance

According to Müller, Junglas and Brocke (2018), "digitization" referred to the use of digital technology to alter business processes, operations, and customer interactions. With the onset of digitization, conventional business techniques have become outmoded, presenting new opportunities for firms to raise their levels of effectiveness, productivity, and profitability (Müller, et al., 2018).

The role of information technology in the modern age is critical to business success as competition is stiff and change is constant (Roderigues, Olivera, Roderigues, 2023). Information technology departments play an ever increasingly more important aspect in organizational performance as how fast they respond to changes in the business environment will have a direct impact on customer experience, business unit success and the overall digital business strategy of the organization (Wessel, Baiyere, Ologeanu-Taddei, 2021).

Digital transformation is causing business departments and information technology departments of the organization to be integrated which has the benefit of allowing organizations to be more agile and flexible and increase their speed of products to market (Rodrigues, et al., 2023).

Digital transformation has brought about the use of digital platforms and tools to enhance company performance. Dwivedi et al. (2021) had found that company performance increases with the use of digital technology as digital channels drive sales and customer experience can be personalised by using the latest technology and analysing social media data and organizational data generated by customers. According to Müller, Junglas and Brocke (2018), this could help organisations improve customer satisfaction, loyalty, and retention, leading to increased revenue and market share. Organizations change their marketing strategies when digital transformation occurs as their online presence increases which results in the organization building relationships with customers on social media which in turn builds customer loyalty and improved organizational performance (Takahashi, 2019).

Rodrigues et al. (2023) conducted a study to determine the effect of information technology departments and business departments having better collaboration. He found that when there is less collaboration between departments it leads to poor organizational performance, however

due to digital transformation the new technologies encourage collaboration and hence increase organizational performance.

Adoption of digital technologies come with risks. Organizations need to fully understand these risks to ensure predictable outcomes (Chouaibi, Festa, Quaglia, Rossi, 2022). Chouaibi et al. (2022) found in their study that organizational adoption of new technology requires increased agility which will affect employees, process procedures and the entire organizational operating model, however they found that when this is done right then it leads to faster products and services to market and thus increased performance.

For companies to fully enjoy the benefits of digitalization, they will need to invest in the infrastructure, training, and support required to ensure that both their employees and consumers can utilise digital technology effectively (Müller, et al., 2018). According to Müller et al. (2018), this requires a significant investment of time and money, as well as a readiness to embrace change and innovation.

Gasco-Hernandez, Nasi, Cucciniello and Hiedemann (2022) conducted a study to understand whether increased organizational capacity increases digital transformation success and improved organizational performance. They found that increasing capacity (resources, technology, technical skills, and knowledge) does not necessarily lead to improved organizational performance and successful digital transformation, it also requires effective leadership that helps with the success (Gasco-Hernandez , et al., 2022).

2.7. Digital transformation in the financial services industry

The financial services industry's digital transformation has been the subject of much study and inquiry. This section presents an overview of important trends, drivers, and difficulties in this field, with a focus on developments in automation, artificial intelligence, data analytics, and user experience.

All industries have been influenced by the advances in technology making competition and change unavoidable, and the financial services industry has not been immune to this (Barrosso & Laborda, 2022). The financial services industry has gone through major changes in recent years, these changes are radical in nature and affects all facets of the industry from the regulatory environment to increase in competition due to more Fintech organizations popping up (Dehnert, 2020).

The advancing of technology in the financial services sector at an exponential pace has created new entrants into the market known as a Fintech company (Barrosso & Laborda, 2022). This word combines finance and technology and these new businesses have been created on the back of the latest technology in the financial services industry and are disrupting the traditional financial services operating models (Gomber, et al., 2017). Banks are finding themselves going through change because of fintechs as these companies draw the attention of bank customers and take market share (Rodrigues, et al., 2023).

Pousttchi and Maik (2018) stated that when it comes to digital transformation in the financial services industry it causes change in the industry due to three-dimensional changes which are the creation of value, the proposition of value and the interaction with customers. Interpreting this it can be concluded that financial services organizations undergo the digital change to be innovative and competitive in the industry and to satisfy customers so that they maintain a competitive advantage.

Another important aspect of digital transformation that helps banks remain competitive is the use of machine learning, artificial intelligence and data to enhance products. According to Alnaser, Rahi, Alghizzawi and Ngah (2023) the use of artificial intelligence in banking is no longer a nice to have but is now part of business as usual. They also mentioned that artificial intelligence is used to handle online banking and it is crucial to meet customer needs (Alnaser, et al., 2023). Artificial intelligence is a computer's ability to make decisions we normally associate with the human mind. Machine learning uses data to train a computer to make decisions (McKinsey and Company, 2023).

Alnaser et al. (2023) conducted a study to see whether artificial intelligence improved user experience in digital banking. Their results show that customer satisfaction increased with the use of artificial intelligence as customers got real time decisions and recommendations on banking products.

Banks are using automation which is part of digital transformation to improve processes and to reduce costs. The automation is computer software that performs the work of humans by doing the repetitive tasks that a human used to do. This allows for employees to be repurposed to do more value adding work that will improve revenue and customer experience, in some instances workers are let go and this reduces costs to the bank (Mamede, et al., 2023).

2.8. Studies conducted that show factors that may impede or enable digital transformation

The 4th industrial revolution has affected every sector of business. Banks are no exception. There are many reasons for banks to undergo digital transformation. Studies conducted by other researchers on reasons that enable and impede digital transformation were reviewed.

Traditional banks are being forced to adopt an open banking system where basic services are being made available to the entire industry to utilize the services when needed. This allows interoperability between banks. This approach is being taken to combat the rise in FinTech companies that pose a threat to traditional banks (Passi, 2022). Traditional banks undergo the digital transformation to stay relevant and compete against non-banks that are looking for new revenue streams. By traditional banks offering open banking services it has allowed an open banking framework to develop between all players and allow financial services companies and others to reduce their time to market with new products and offer cutting edge services which ultimately benefits the end user (Passi, 2022). The evolution of funding mechanisms for loans from indirect corporate loan financing by banks to a more direct form of fundraising has resulted in banks altering their conditions for loans and enhanced their product offerings to customers in order to remain competitive (Boufounou, Mavroudi, Toudas, Georgakopoulas, 2022). Boufounou (2022) found that banks that adhere to international digital transformation standards are continuously upgrading digital service offerings like payment services, platforms and social media in order to remain competitive.

Passi (2022) found that collaboration on initiatives have enabled connections for data exchange and payments to occur, sharing of APIs among members allow interoperable services which end users can benefit from. Passi (2022) also found that it is to the advantage of banks to work as a network with digital transformation initiatives as it reduces application costs and enables system efficiency.

The Covid pandemic has accelerated the rate of change of digital adoption in banks. They have changed their operational models and hence have become more digital to adapt to the change brought about by the pandemic by seeing it as an opportunity rather than a threat (Boufounou, et al., 2022).

Diener and Spacek (2021) found that in organizations if the manager's perspective on digital transformation is conflicted and they are not fully onboard with it then this poses a significant barrier to the successful implementation. Employee age and whether they have the relevant digital qualifications also pose a significant challenge in the successful adoption of digital

technologies in organizations (Diener & Špaˇcek, 2021). A study conducted by Ainuaimi (2022) found that transformational leadership has a significantly positive impact when it comes to influencing digital transformation.

Brohman and Copeland (1999) found that the most crucial factor when adopting change in an organization is the attitude of employees. It is the attitude of the employees that determine whether change succeeds or fails. Employees need to be kept in the loop with any digital transformation journey as new technology is implemented. It is essential to keep employees informed with upcoming changes and be shown how to use new technology. It is therefore important to take customers and employees along with the digital transformation journey (Diener & Špaˇcek, 2021). Leaders often deal with employees who feel very stressed and overwhelmed when there are digital technology changes. This causes adoption to be slow as employees can have some resistance due to all the changes occurring at the same time (Cascio & Montealegre, 2016).

Sometimes employees are willing to embrace change; however, due to not having adequate knowledge or skills find it difficult to change. It is important to give employees practical exposure to new technology. This poses a barrier to the success of any digital transformation done by an organization (Selimovi, Oilav-veli, Krndzija, 2021). Selimovi, Oilav-veli and Krndzija (2021) also found from research that if employees feel connected to each other then it positively impacts performance in a digital workplace, thus it implies that employees will embrace digital technologies and digital transformation can be successful if employees are connected to each other and communicate about the changes.

A study conducted by Arias-Peres and Velez (2022) concluded that employees have a complex that they name “not invented here syndrome” which causes employees to resist change and digital transformation. This also causes organizations to have a slow innovation culture and have less new products to market.

2.9. Merits and demerits of implementing digital transformation in a financial services industry

A bank of the future needs to support economic growth by offering a wide range of value-added services (Passi, 2022). Organizations need to change their mindsets and have data-driven innovation to maintain a competitive advantage. This will be achieved by collaboration which will break down barriers and allow for the exchange of data between banks, third parties and

technical providers which in turn will maximize customer benefits and interoperability between the different organizations (Passi, 2022)

For digital change to occur in a successful manner there must be a framework to follow to enable transformation. However, this transformation can still fail because of problems with i.t infrastructure both on the banks side and on the infrastructure provider (Diener & Špa˘cek, 2021).

Mavlutova et al. (2023) conducted research on how digital transformation enables the financial sector to promote a sustainable developmental process through financial inclusion and operational efficiency. Mavlutova used various statistical analysis methods and found that when banks ensure the digital payments adoption is high then this reduces staff costs and decreases the amount spent on bank assets (Mavlutova, et al., 2023).

When proper procedures are developed to promote organizational agility then this has a positive impact on digital transformation. This implies that if there is no proper procedures then it will negatively affect the transformation process (AlNuaimi, et al., 2022).

Arias-Perez and Velez-Jaramillo (2022) found that during the digital transformation process common sense and individuals' emotions should not be overlooked. They found that employees a very aware of the threats that automation brings in terms of job losses and they can go from being allies to the main barriers to implementing digital technologies (Arias-P´erez & V´elez-Jaramillo, 2022).

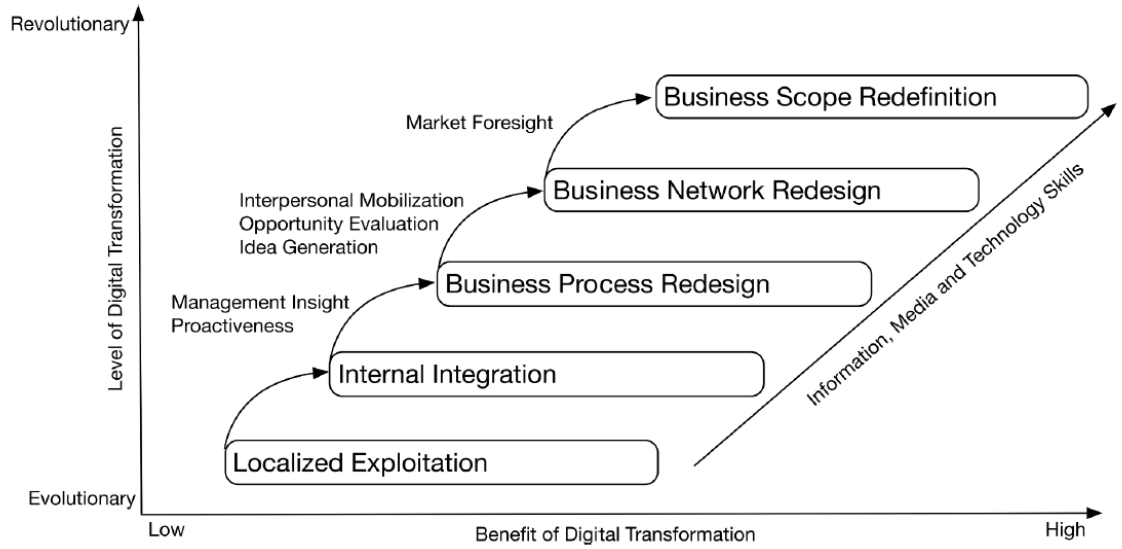

Figure 2. 2: Benefits of digital transformation (Blanka, et al., 2022)

Blanka, Krumay and Rueckel (2022) found that learning represents human transformation. It is therefore crucial to have organizational conditions that foster learning. Figure 2.1 shows the different levels in digital transformation. For organizations to reach different levels learning must happen at individual level and organizational level since many organizations are unfamiliar with digitalization and the opportunities it brings. (Blanka, et al., 2022). Competencies of individuals are developed at different levels of the digital transformation journey and hence the organization transforms (Blanka, et al., 2022).

2.10. Previous studies on the implementation of digital transformation in a financial services organisation in South Africa

Ajigini and Chinamasa (2023) conducted research to develop a model for digital transformation in the financial sector in South Africa. They found that there are seven critical factors that contribute to digital transformation to make it predictable. The factors are as follows: organizational IT portfolio, organizational culture, organizational structure, organizational dynamic capabilities, leadership, employee roles and skills, ethics. Organizational culture had the highest contributing factor. This implies that should an organization want to undergo digital transformation successfully then they need to align the culture accordingly (Ajigini & Chinamasa, 2023).

Research was conducted by Louw and Nieuwenhuizen (2020) on the five major banks in South Africa. They found that all banks in South Africa have started a digitalization journey to meet customer needs. The research shows that all five banks in South Africa have a website, smart phone app and the smart phone app is zero rated in terms of data charges. This shows that the banks are developing technologies to meet the needs of their customers to allow them to conduct banking online without the need to visit a branch (Louw & Nieuwenhuizen, 2020).

2.11. Employee morale in the business banking department

Employee morale is an important factor of organisational success in the commercial banking sector. It includes employee happiness, motivation, and engagement and has a substantial impact on work satisfaction, productivity, and general well-being. Understanding the elements influencing employee morale is critical for creating a pleasant work environment and attaining organisational success (Grant, Booth, Bloomfield, 2020).

Job satisfaction is an important aspect influencing employee morale in the commercial banking area. Employees that are happy with their employment have greater morale and are more likely to be interested in their work (Alsaad & Almaamari, 2020). According to research, employment

features such as meaningful work, autonomy, and possibilities for progress are positively related to job satisfaction and, as a result, employee morale. Employees are more likely to have better levels of job satisfaction and morale when they believe that their work is important and linked with their beliefs (Schroff, et al., 2011). A positive work environment, fair salary, and recognition and awards all contribute to increased levels of job satisfaction, which leads to higher employee morale. Employees are more likely to be content with their work and have a stronger feeling of morale when they feel valued and acknowledged for their efforts (Aldoseri & Almaamari, 2020).

Another important component influencing employee morale in the business banking area is motivation. Motivated workers are more likely to be engaged in their job and have greater levels of morale. Employee morale is favourably impacted by the fulfilment of internal and extrinsic motivators such as difficult work, career growth opportunities, and a competitive salary. Employee morale and job satisfaction are better when people are inspired by their work and perceive prospects for development and progress (Davis, 1986).

Expectancy Theory and *Self-Determination Theory* are two motivational theories that may help you understand how employee motivation affects their overall morale and performance. These theories emphasise the significance of matching workers' aims and expectations with organisational goals, as well as providing them with the tools and support they need to succeed (Teo, 2011).

Employee morale is strongly related to employee engagement in the business banking area. Employee engagement is associated with better levels of morale, job satisfaction, and dedication to their work (Scherer, et al., 2019). Employee morale is boosted by factors that promote employee engagement, such as effective communication, leadership support, empowerment, and participation in decision-making processes. Employees are more likely to have greater levels of morale and job satisfaction when they feel involved in their work and have a feeling of ownership and autonomy (Scherer, et al., 2019).

Employees' mood and performance decrease when there is poor communication and resultant collaboration between departments. It was found that when collaboration is encouraged then employee morale goes up (Rodrigues, et al., 2023). Rodrigues et al. (2023) also found that when employees lack technical skills and when management does not include them in decisions then this leads to a decrease in morale and performance.

Employee morale is greatly influenced by the organisational culture of the business banking department. A pleasant and supportive culture characterised by open communication, trust, and cooperation boosts employee morale. Employee morale and work satisfaction are better when they feel appreciated, respected, and supported by colleagues and superiors. A poisonous or unsupportive culture, on the other hand, may have a detrimental influence on employee morale, leading to lower work satisfaction and engagement. It is critical for business banking organisations to have a healthy organisational culture that supports employee well-being and morale (Balakrishnan, & Das, 2020)

2.12. The impact of digital transformation on employee morale

In recent years, there has been a lot of discussion about how digital transformation affects employee morale. This section examines current research to get a better understanding of the effects of technology advances, automation, job redesign, and changing responsibilities on employee morale in the commercial banking sector.

Several studies have been conducted to investigate the influence of digital transformation on employee morale. Scherer, Siddique, and Tondeur (2019), employed the Technology Acceptance Model (TAM) to predict student attitudes towards e-learning in aerospace education, emphasising the significance of technology acceptance in affecting morale. Schroff, Orth, and Busch (2011) investigated the link between perceived advantages and loyalty in the setting of online banking, providing insight into how technology improvements affect employee morale. Teo (2011) researched the elements that influence instructors' intentions to utilise technology, gaining insight into the impact of technology adoption on employee morale.

Research has shown that digital transformation has a positive impact on employee morale. Hassan and Lukman (2020), investigated the comparative impacts of before and post bank mergers and acquisitions on employee productivity, emphasising how technology developments boosted morale. Furthermore, Balakrishnan and Das (2020) investigated how organisations reorganise to undertake digital transformation, emphasising the relevance of a healthy organisational culture in boosting employee morale.

The negative effects of digital transformation on employee morale, on the other hand, should not be disregarded. Philip (2021) examined the influence of digital transformation on employee behaviour, emphasising the need of organisations successfully managing the changes to prevent any negative impacts on morale which needs leaders to play an active role in transforming employees and getting them ready for the change (Hassan & Lukman, 2020). Das

(2020) focused on digital banking service brand equity and millennial consumption, bringing insight on the problems and barriers that workers may face throughout digital transformation. The influence of digital transformation on employee morale has been studied in terms of organisational culture. Lindawati and Parwoto (2021) explored the influence of transformational leadership and motivation on employee performance, emphasising the importance of work satisfaction as a moderator during digital transformation. It was found that when leaders include employees in the journey then there is increased job satisfaction. Aldoseri and Almaamari (2020) investigated variables impacting employee performance in the banking industry, emphasising the significance of organisational culture in boosting morale. They also found that leadership style, job satisfaction and proper employee engagement affect the motivation of employees at work in the banking sector. The study by Lindawati and Parwoto (2021) further showed that motivation has a major influence on how employees perform at their jobs and that leaders influence the motivation of employees during the digital transformation journey.

2.13. Conceptual framework

A conceptual framework is needed to show a relationship between variables (Swaen & George, 2022). Figure 2.2 shows the relationship between digital transformation and how employees are impacted. They are impacted by job losses, demoralisation, anxiety, and a skills gap. These variables could be influenced by whether they are involved in the decision-making process and whether there is adequate training available. The research aims to prove if this is true.

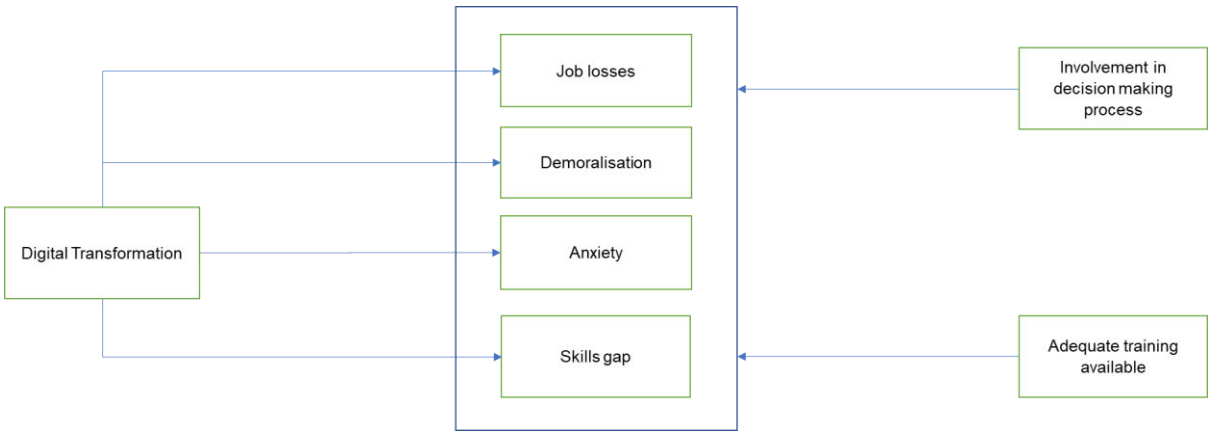

Figure 2. 3: **Digital transformation in South Africa's banking industry (Sovtech, 2019)**

2.14. Gaps and future directions

While current research has shed light on the influence of digital transformation on employee morale in the business banking area, several gaps remain. This section identifies these

shortcomings and suggests future study directions to improve our knowledge of the complicated interaction between digital transformation and employee morale. The long-term implications of digital transformation on employee morale are one area that merits additional exploration. Many studies have concentrated on the immediate implications of technological advances, but it is necessary to investigate how these changes unfold over time and whether they have long-term repercussions for employee morale. Longitudinal studies that measure employee morale before, during, and after the implementation of digital transformation efforts may give useful insights into the long-term viability of the reported good or negative consequences (Schroff, et al., 2011). Another gap in the research is the investigation of individual variations in perception and experience of digital transformation, as well as its impact on employee morale. Employees' degrees of technology preparedness, flexibility, and openness to change may all impact how they respond to digital transformation projects. Future study should look at how individual factors like age, tenure, and technical skill influence the link between digital transformation and employee morale (Teo, 2011).

The role of leadership in managing digital transformation and its influence on employee morale is something that has to be looked at more. During digital transformation, leaders play a critical role in establishing organisational culture, offering support, and encouraging change. Future study should look on the leadership practices and tactics that successfully improve employee morale throughout digital transformations (Lindawati & Parwoto, 2021). Furthermore, the exact methods through which digital transformation affects employee morale must be clarified. While studies have highlighted both the good and negative effects of digital transformation, further study is required to understand the underlying processes and mediating elements at work. Investigating factors such as communication, training, job redesign, and employee participation may give significant insights into how organisations can maximise good outcomes while mitigating negative consequences for employee morale (Das, 2020).

Existing research's methodological inadequacies provide chances for further investigation. Many studies have used self-report measures and cross-sectional designs, which may restrict the capacity to demonstrate causal links and represent the dynamic character of digital transformation. To improve the validity and generalizability of results, future research should include mixed-method techniques, longitudinal designs, and objective measures of employee morale (Grant, et al., 2020). Finally, growing trends in digital transformation, such as the incorporation of artificial intelligence, machine learning, and robots, open up new study opportunities. Exploring the precise consequences of these technologies on employee morale

and developing methods to encourage pleasant employee experiences in the context of these breakthroughs might give useful insights for organisations navigating the digital world (Scherer, et al., 2019).

2.15. Summary

The aim of this chapter was to provide more detail into what digital transformation is. The advancement of digital technologies was discussed and the impacts of these technologies on the business landscape. The need for companies to adopt the ever-changing technologies was highlighted. Digital transformation requires a sound strategy to succeed.

Digital transformation is having an impact on all industries. The literature review zoned into the financial services industry and discussed what these changes have on the market. It is allowing automation of processes and driving continuous change. The South African financial services industry was then discussed.

Lastly, the chapter went further into providing details on the morale implications of employees because of the ever-changing financial services sector. Articles that where previously written about the topic were presented in the chapter together with the gaps in research. There have been many articles written on the affect of technology and customer satisfaction. The effect of technology and employee morale has not been explored in-depth.

Chapter 3 : Research methodology

3.1. Introduction

Research is an insightful process that is utilised when researching a phenomenon. Research methodology present a guideline through which the research will be carried out. This methodology helps in deciding the suitable use of research methods, sampling and methods of data collection and analysis (Wild & Diggines, 2013)

This section outlines the research aim, research paradigm, population and sample, sampling method, construction of the instrument, data collection, data analysis, reliability and validity, bias, and ethical considerations.

3.2. Research paradigm

A research paradigm can be described as a set of fundamental beliefs that have to do with principles. Research paradigms illustrate the nature of the world, that is, how individuals fit into it and the number of relationships that exist between the two (Saunders, et al., 2012). Saunders et al. (2012) suggested the presence of three main research paradigms, they are namely positivism, interpretivism and pragmatism. Positivism philosophy deals with quantitative studies and embraces a deductive approach while interpretivist philosophy is related to qualitative studies and makes use of an inductive approach. A pragmatist approach on the other hand is associated with mixed approaches and makes use of a pragmatism approach (Saunders, et al., 2012).

3.3. Research design and methods

3.3.1. Research design

The research design is concerned with how the researcher intends to integrate the various components of the research study in a coherent and logical way. This ensures the effective addressing of the research problem (Saunders, et al., 2012). There are a lot of research designs that can be used in research, and they include cross-sectional, longitudinal, case studies, experimental, interviews, survey, and mathematical modelling. This research adopted a questionnaire design.

A questionnaire can be described as a research strategy that is used for the purpose of answering questions such as what, where how much and how many? Questionnaires can further be defined as research methods that are used for gathering data from a pre-determined group of research respondents to gain information and insights on different topics of interest (Blanche, et al.,

2012). They are concerned with asking respondents for intended information through questionnaires, which can be distributed physically or electronically.

The justification behind the selection of the questionnaire as a data collection instrument is that it sought to collect data from a pre-determined group of employees working in the financial institutions.

3.3.2. Research methods

According to Trafimow (2014), there existed two types of research methods and these are quantitative and qualitative methods. These methods are used in different situations. The quantitative research method is aimed at seeking regularities in human lives by separating the social world into applied components named variables, which can be represented arithmetically as frequencies or rates (Saunders, et al., 2012). This method has to do with measuring elements that can be counted by using predetermined classifications that can be subjected to statistical analysis. On top of that, the quantitative method allows for reduced biases and maintains that the researcher does not have to use own opinion to communicate information (Moore, 2019).

On the other hand, Isaacs (2014) suggested that the qualitative research method is good for studying complicated issues such as human behaviour. Qualitative data is gathered from non-quantifiable or non-statistical sources. This data assists the researchers to understand emotional responses of research subjects, that cannot be revealed using quantitative research method. This research method suggests the use of prolonged contact with people as they experience their normal daily lives. It can be added that this method is beneficial to use as it enables the collection of detailed holistic views and yields detailed information about participants (Isaac, 2014).

This research used the positivist paradigm and quantitative approach because the data that was needed to achieve the stated research objectives was quantitative in nature. This approach was selected because the researcher needed to access a large sample size of 50 employees.

3.4. Study setting

This research was conducted in large financial intuitions in the Gauteng Province of South Africa. The research particularly focuses on the business banking division of banks. The choice of financial institutions is informed by the fact that increased digital transformation within this sector and many employees have been affected of late.

3.5. Population and sample of the study

Wilson and MacLean (2011) described population as the whole group that the research wishes to investigate and understand. The target population for this research is the employees who work in financial institutions. These employees are the ones that are directly affected by the implementation of digital transformation. On the other hand, a sample is a sub-set that carries all the features of the chosen research respondents (Saunders, et al., 2012). Sampling is carried out for the purpose of minimising cost, time, and effort that is required to investigate the whole population (Saunders, et al., 2012). This research selected 50 employees as respondents. The choice of these employees is informed by the fact that they are the ones who are directly affected by digital transformation in their workplaces.

3.6. Sample size

The population was divided into groups of business units within the organisation under study in the Gauteng Province. The financial organisation involved in this study and the management of this organisation suggested that the target sample should be 50 employees. Slovin's formula was used to determine the population size required with a sample set of 50 (Williams, 2023). Hence from the business units in the organization the business banking division had a suitable population size of 60. This allowed a 95% confidence level in the data that would be obtained from 50 individuals. Wild and Diggines (2013) suggest that a sample size should be determined by how much data is required to make a correct decision on particular research. In this study the data required is only concerned with digital transformation and employees who deal with digital issues in an organisation.

3.7. Sampling method

There are various sampling strategies that are available for use in research. These strategies can be classified under probability and non-probability. Probability sampling is made up of simple random, stratified random, systematic and cluster while non-probability sampling is made up of quota, purposive, and convenience sampling (Saunders, et al., 2012). Simple random sampling is concerned with a subset of individuals who are chosen from a larger set in which a subset of individuals is chosen randomly while stratified random sampling constitutes research respondents that are taken from every subgroup, ensuring that it reflects the diversity of the research population. Systematic sampling is concerned with the selection of elements from an ordered sampling frame while cluster sampling is used to divide the research population into several groups, called clusters (Saunders, et al., 2012). On the other hand, quota

sampling enables the choice of research participants from population subgroups that the researchers have defined. Purposive sampling is about the identification and the selection of information-rich cases for the most efficient and effective use of limited resources. Convenience sampling is about selecting cases that best enable the research respondents to answer research questions correctly and achieve the laid down research objectives (Saunders, et al., 2012). This research made use of stratified random sampling where 50 employees from a financial service company was chosen from the business banking division.

3.8. Construction of the instrument

The instrument was a structured questionnaire with closed-ended questions. This questionnaire was broken down into two sections, section A and section B. Section A is made up of biographical details of respondents while section B is made up of the actual research questions which are based on the impact of digital transformation in financial institutions. This questionnaire comprises a five-point Likert scale that will range from 1=strongly disagree to 5=strongly agree.

It should be noted that the scale items to measure the concerned constructs were adopted from previous studies related to digital transformation. The scales that were adopted for this study had Cronbach Alpha values ranging from 0.8 to 0.9 and this indicates that the adopted scales meet the criteria for internal consistency reliability.

3.9. Data collection

Saunders, Lewis and Thornhill (2012) posited that data can be gathered by using different techniques that can include questionnaires, interviews, and observations. Researchers commonly use questionnaires when collecting data from a large pool of respondents while interviews are qualitative research methods that are based on asking questions for the purpose of gathering data. Interviews work with two or more people, of which one is the interviewer responsible for asking the questions (Saunders, et al., 2012). On the other hand, observation is a research method where the researcher observes participants and issues in their natural settings. This scenario in turn enables researchers to observe their research subjects as they make choices and react to situations in their natural setting.

Data in this research was collected by way of questionnaires. These questionnaires were distributed to research participants electronically, via google sheets. This data gathering method is advantageous in that it can receive many responses at a given period.

Pre-testing of the research instrument was conducted to determine whether a data collection instrument was valid and reliable (Saunders, et al., 2012). The individuals that were selected for the pre-testing had similar characteristics to the research respondents. According to Coopers and Schindler (2011) the main reason for conducting the pre-testing is to identify any challenges that are associated with data collection instrument before the actual study is carried out. Selected employees who work in the business banking division were selected for this pre-testing. Questions that were not clear to the respondents were re-phrased.

3.10. Data analysis

The data that was gathered by the researcher was recorded on an Excel template. This Excel template was coded to enable the data to be labelled for various options that were prevalent in the questionnaire. The SPSS Version 26 software was used to analyse the data and to create some descriptive statistics and other necessary statistical tests. Various tables, graphs, and charts were constructed to present data, after-which the analysis and interpretations were done.

Factor analysis is a statistical technique that can be used to group or summarise a large set of rating scale items into a smaller number of sub-groups called factors. Exploratory factor analysis (EFA) was used to establish the dimensions of data for this research (Surucu, Yakilimaz, Muslakci, 2022).

3.11. Reliability and validity of the study

3.11.1. External validity

External validity can be described as the level to which the research results can be generalized across the whole world. It includes factors such as different research circumstances, scenarios, situations, respondents, influencers, and time periods.

There are different types of external validity, and they include convergent and discriminant validity (Shuttleworth, 2009). It should be noted that both convergent and discriminant validity are sub-types of construct validity. Construct validity suggests that a test designed to measure a particular construct is measuring that construct. Convergent validity takes two measures that are supposed to be measuring the same construct and indicates that they are related. In this research convergent validity should be seen to be measuring the constructs of anxiety, demoralisation, stress, redundancy, and skills gap. On the other hand, discriminant validity indicates that measures that should not be related are not related and therefore their usage on

measuring concerned constructs will not produce results that are related (Coopers & Schindler, 2011).

3.11.2. Internal validity

Internal validity has to do with the degree to which the outcome of the research is attributable to the independent variable (Cuncic, 2022). To make sure that there is internal validity of measurement, the correlation coefficient was used to test the relationship between research variables. The researcher also checked if all the questions on the questionnaire addressed all the research objectives adequately.

3.12. Reliability

Saunders and Lewis (2012) defined reliability as the likelihood of obtaining consistent results when similar data collection instruments are used on different occasions.

To ensure the reliability, the questionnaires were pre-tested while data collected through questionnaires was tested by using Cronbach's Alpha coefficient. According to Tavakol and Dennick (2011) Cronbach's Alpha is the broadly used objective measure of the internal consistency of a test or scale. This Cronbach Alpha is easier to use as it only requires one test administration unlike other estimates like generalizability theory, item-response theory, and test- retest reliability estimates. The questionnaire was only adopted because the Cronbach's Alpha coefficient was at least 0.7. A Cronbach's Alpha coefficient of at least 0.7 indicates internal consistency of the data collected.

3.13. Bias

Biases can occur at any of the stage of research. These biases are many and the common ones are outlined below.

- **Selection/Sampling bias**

Selection or sampling bias is prevalent during the planning phase of research. It occurs when the criteria used to find research subjects for various research groups are basically different. This means that data collected cannot accurately represent the general population (Villegas, 2023).

- **Design bias**

This kind of bias can also be found in the planning phase of the research. It takes place when researchers use subjective criteria in distinguishing between subject groups. Consequently, the

criteria that separate groups may be arbitrary instead of statistically significant (Villegas, 2023).

- **Measurement bias**

This kind of bias commonly happens during the research phase. It describes when researchers measure something poorly, without rigour. This results in the distortion of the validity of the data collected (Villegas, 2023).

- **Response bias**

Response bias happens when only certain types of research subjects respond to an invitation to enter a study. This, like the selection bias, causes the study group not to be representative of the larger population (Villegas, 2023).

- **Reporting bias**

This is yet another bias and it describes any number of discrepancies that take place in the reporting of a study. These discrepancies are influenced by the data's nature and outcomes (Villegas, 2023).

Researchers should ensure that they are not subjective when analysing data. The discussion of the findings should only be linked to what was said by respondents and not to manipulate the discussion to fulfil intended needs. The researcher should clearly inform all respondents about the aim of the study. This helps the research respondents to have an idea on how to answer the questionnaire adequately. Reliability testing should also be conducted to determine the usefulness of collected data.

3.14. Ethical considerations

Saunders et al. (2012) came up with various ethical considerations that can be utilised to guide the research process. These considerations are highlighted below.

- The researcher is supposed to obtain an ethical clearance letter from the institution's ethics clearance office.
- The researcher should always uphold the concept of objectivity. He should not in any way breach the research norms and values that guide research studies. The results of the research should be recorded without altering the findings of the study.

- The researcher should create a good relationship with research respondents. This will be done by ensuring that all the necessary information is communicated to the respondents before the data collection process commence.
- The researcher should make sure that research respondents are not exposed to any form of harm. These respondents should be told that they are free to participate or to withdraw from participating in the research whenever they feel inclined to do so.
- The researcher should guarantee the privacy and confidentiality of the research respondents before, during and after the research.
- The researcher should inform respondents in the research that participation is voluntary. A consent form should be given to these respondents to sign before the data is collected.

3.15. Summary

This chapter has given a detailed discussion of the research design and methodology that was used in the study. The research design that was chosen was in line with the research questions and objectives of this study. The sampling methods and data collection instruments that were selected were in line with the sensitivity of the research topic. The suggested data analysis and presentation fit well with the nature of the data that was collected. Different kinds of biases that can affect the outcome of the results were elaborated in detailed and some ways with which to reduce these biases were outlined. The subsequent chapters present the results, discussion, and interpretation of findings of the study.

Chapter 4 : Results

4.1. Introduction

The following chapter presents an analysis of the data collected in the study of the effects and implications of digital transformation in the business banking division of a large financial services organization. This includes understanding the benefits of digital transformation for the business, how it affects employee morale, and the strategies that should be used to address employee morale during this transformation. The analysis is based on 13 variables measured through a questionnaire instrument. A principal component analysis (PCA) is applied to reduce the dimensionality of the dataset and to identify the underlying components that explain the most variance in the responses. This procedure is carried out through communalities, eigenvalues, factor loadings, and component score coefficient matrices.

4.2. Reliability statistics

Table 4. 1: Cronbach Alpha

Reliability statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.836	.852	15

The reliability of a scale or group of items in measuring a construct is evaluated using Cronbach's alpha, a measure of internal consistency. Cronbach's alpha is often interpreted differently based on the situation and the subject matter. A Cronbach's alpha rating of 0.836, on the other hand, is generally regarded as being high and reflecting a high degree of internal consistency among the items. This implies that the items have a strong correlation and consistently assess the same concept. It is preferable to have a high Cronbach's alpha score since it shows that the scale is dependable and constant. This indicates that the outcomes from using the scale are reliable and accurate.

Furthermore, Pallant (2010) emphasized the use of the reliability test Cronbach Alpha in determining the internal consistency of questionnaires. The organisational and social sciences often employ the Cronbach Alpha coefficient, which assesses the internal consistency of a group of dichotomous or scale questions. A high Alpha value, more than 0.5, indicates a scale's excellent internal consistency with a given sample. Values below 0.5, however, need to be taken seriously. As mentioned earlier and inferred from the above, the output for the reliability statistics has a Cronbach alpha value of 0.836, which indicates a good reliability level.

4.3. Demographic data analysis

Table 4. 2: Marital status of participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	27	54.0	54.0	54.0
	Married	22	44.0	44.0	98.0
	Divorced	1	2.0	2.0	100.0
	Total	50	100.0	100.0	

Table 4.2 above outlines the distribution of marital statuses among a group of 50 respondents. Of the total sample size, a majority, or 54%, identified themselves as single. This means more than half of the individuals that participated in the questionnaire are not currently involved in a marital relationship. The frequency column indicates that this accounts for 27 individuals out of the total number of respondents. The cumulative percentage column shows that up to this category, 54% of the total respondents have been accounted for. Following singles, the next most prevalent group consists of married individuals. They make up a significant portion of the total sample size, at 44%. In terms of frequency, this accounts for 22 respondents. When the percentages of single and married respondents are combined, it forms a cumulative percent of 98%. This means that only 2% of the total sample is left unaccounted for at this point.

Finally, divorced individuals represent the smallest group in the participants of the questionnaire, making up only 2% of the total. This translates into just one respondent identifying as divorced. This final category brings the cumulative percentage to 100%, indicating that all respondents have been accounted for.

The data suggests a predominantly single and married demographic among the respondents, with a very minor representation of divorcees. This could reflect the specific sample chosen for this questionnaire and might not necessarily indicate the marital status distribution in the wider population.

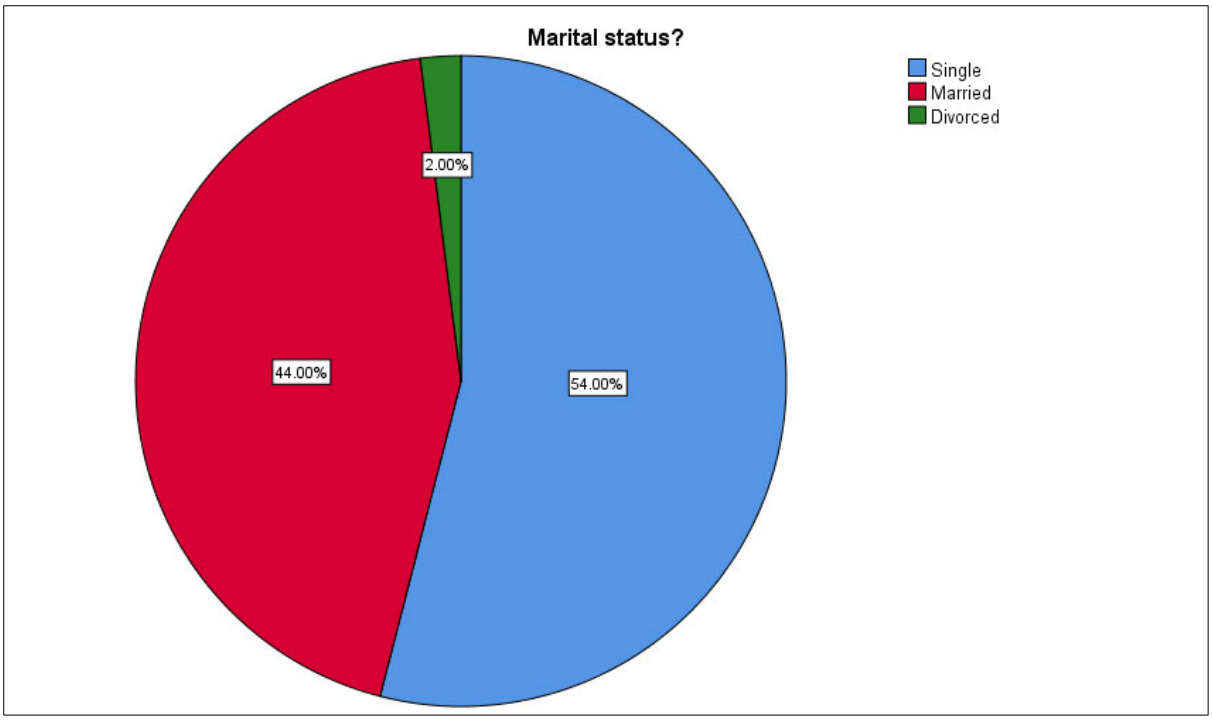

Figure 4. 1: Marital status of participants

The percentage values of the marital status are better displayed using the above pie chart. It shows that from all the respondents, only 2% were divorced, 44% were married and 54% were single as shown above.

Table 4. 3: Breakdown of age data

What is your age?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24 years	2	4.0	4.0	4.0
	25-34 years	23	46.0	46.0	50.0
	35-44 years	13	26.0	26.0	76.0
	45-54 years	12	24.0	24.0	100.0
	Total	50	100.0	100.0	

Table 4.3 provides a breakdown of the respondents' ages. The age ranges are divided into four categories, namely: 18-24 years, 25-34 years, 35-44 years, and 45-54 years.

The youngest age group, 18-24 years, makes up the smallest portion of respondents, representing just 4% of the total. This corresponds to only two out of the 50 individuals. With these individuals accounted for, the cumulative percent sits at 4%.

The largest age group is the 25-34 years range. This category alone encompasses almost half of the respondents, with 46% falling into this range. In terms of the actual number of respondents, this means 23 individuals are aged between 25 and 34. By adding this percentage to the previous cumulative total, we find that half of all respondents fall into the 18-34 years age range.

The next age group, 35-44 years, represents a little over a quarter of the respondents, at 26%. This equates to 13 of the individuals that completed the questionnaire. Combining the percentages of all age groups up to this point, we can see that a cumulative total of 76% of respondents are aged 44 or younger.

The last age group in the questionnaire is those aged 45-54 years. This category accounts for the remaining 24% of respondents, which amounts to 12 individuals. With the inclusion of this group, the cumulative percentage reaches 100%, confirming that all respondents have been accounted for.

From this data, it can be observed that the largest proportion of respondents falls within the 25-34 age bracket, followed by the 35-44 and 45-54 brackets. The smallest number of respondents are in the 18-24 age range. This information could provide useful insights into the demographic makeup of the respondents, which in turn might be critical for understanding the context of their responses.

The corresponding bar graph indicated in figure 4.2 further aids in visually understanding this age distribution. The highest bar represents the 25-34 age group, followed by the 35-44 and 45-54 bars, and the lowest bar would represent the 18-24 group. This gives a clear picture of the concentration of respondents in the middle age brackets.

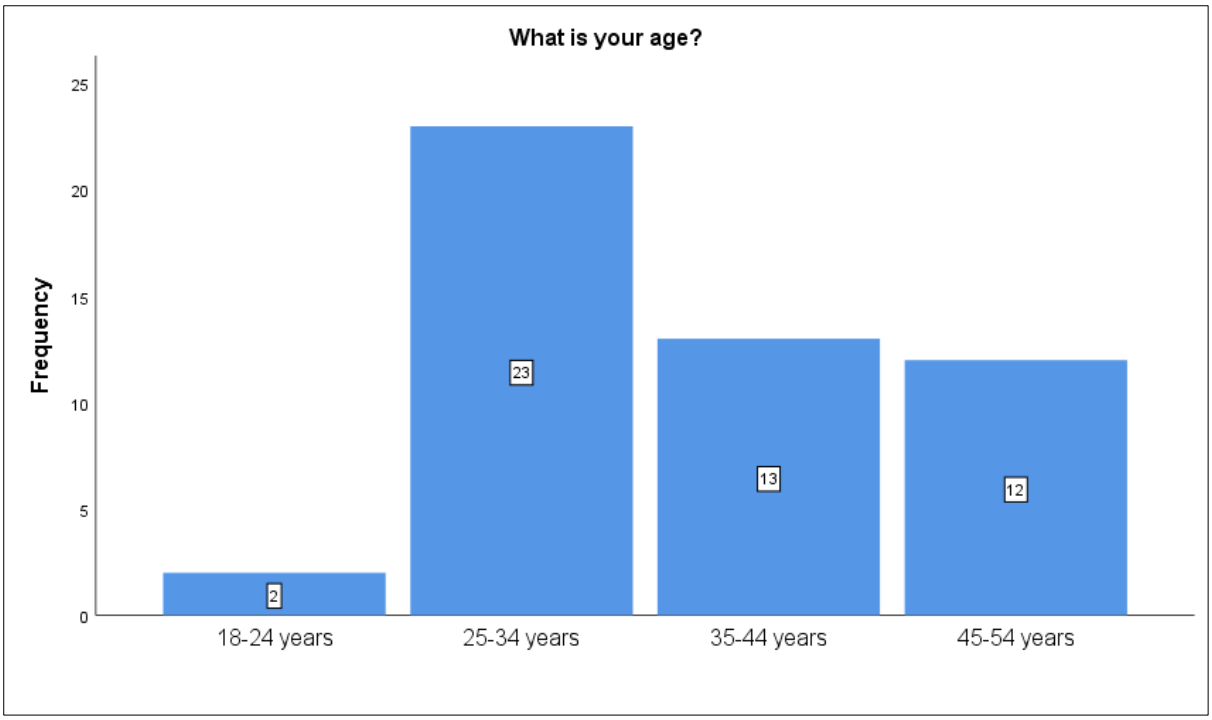

Figure 4. 2: Age distribution of participants

Figure 4.2 displays the ages of the workers in a pictorial view. It is noted that the highest number of responses comes from 25-34 years group, followed by 35-44 years, followed by 45-54 years and lastly 18-24 years of age which is also cemented by the percentages in the age group table.

4.4. Factor analysis

Factor Analysis is a statistical method used to identify which variables in a dataset are most closely connected (Kumar, 2011). Two tests often used to ensure that the data is suitable for factor analysis are the Kaiser-Meyer-Olkin (KMO) test and the Bartlett's Test of Sphericity.

The KMO test measures sampling adequacy, that is, the extent to which each variable in the dataset can be predicted without error by the other variables. The KMO index varies between 0 and 1. A KMO value close to 1 indicates that the patterns of correlation amongst variables are relatively compact and hence factor analysis should yield reliable and distinct factors.

Conversely, a KMO value close to 0 implies that the sum of partial correlations is large relative to the sum of correlations, indicating factor analysis is likely to be inappropriate. For this study, the KMO measure is 0.712, which is considered "middling" to "meritorious" based on Kaiser's classification and indicates that the data is adequate for factor analysis.

The Bartlett's Test of Sphericity checks the hypothesis that the correlation matrix is an identity matrix, which would indicate that the variables are unrelated and therefore unsuitable for structure detection. A significant Bartlett's test (i.e., a small p-value) indicates that an identity matrix is not a good fit for our correlation matrix (Bobbitt, 2019). Thus the variables have some relationships with each other, making the dataset suitable for factor analysis. In this study, the Bartlett's Test of Sphericity is significant (with an approximate chi-square value of 291.975, 78 degrees of freedom, and a p-value less than 0.05), indicating that the correlation matrix is not an identity matrix and is suitable for factor analysis.

Table 4. 4: KMO and Bartlett's test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.712
Bartlett's Test of Sphericity	Approx. Chi-Square	291.975
	df	78
	Sig.	0.000

The Bartlett's test tests the hypothesis of homogeneity of the correlation matrix. In this study, the homogeneity hypothesis was rejected, this indicates that the variables in the correlation matrix are sufficiently interrelated that they could be used in factor analysis. Bartlett's test has a significant value when correlation between variables is large enough to be used in factor analysis.

The questions were summarized and given a code as shown below:

- The introduction of digital transformation has increased job satisfaction among employees? (M1)
- Digital transformation has enhanced collaboration and teamwork among employees? (M2)
- Employees are more motivated to work due to the introduction of digital transformation? (M3)
- Digital transformation has contributed to improved work-life balance for employee? (M4)
- The implementation of digital transformation has led to increased levels of stress among employees? (M5)
- The organization should provide adequate training to employees during digital transformation? (S1)
- The organization should involve employees in decision-making processes related to

digital transformation? (S2)

- Employees should be adequately rewarded and recognized for their adaptation to digital transformation? (S3)
- The organization should provide effective communication regarding changes brought about by digital transformation? (S4)
- The organization should consider employee feedback when implementing digital transformation? (S5)
- Digital transformation has streamlined operations within the business banking division? (B1)
- Digital transformation has improved customer service in the business banking division (B2)
- The business banking division has become more efficient due to digital transformation? (B3)
- Digital transformation has facilitated data management and analytics within the business banking division? (B4)
- The business banking division has benefited from cost reductions due to digital transformation (B5)

Table 4. 5: Anti-image matrix

		(B4)	(M3)	(M4)	(M5)	(S1)	(S2)	(S4)	(S5)	(M2)	(M1)	(B1)	(B3)	(S3)
Anti-image Covariance	(B4)	.513	-.087	.111	-.070	-.093	-.014	-.056	-.018	.033	-.010	-.076	-.253	.057
	(M3)	-.087	.310	-.154	.032	.126	.057	.041	-.035	-.112	-.082	.071	-.006	-.073
	(M4)	.111	-.154	.366	.146	-.183	-.088	.035	.035	-.038	.026	-.097	-.053	.078
	(M5)	-.070	.032	.146	.604	-.118	-.123	.201	-.020	-.099	.078	-.061	.090	.087
	(S1)	-.093	.126	-.183	-.118	.547	.005	-.028	-.151	-.003	-.023	-.029	.006	-.004
	(S2)	-.014	.057	-.088	-.123	.005	.333	-.087	-.054	.035	-.054	.075	.002	-.240
	(S4)	-.056	.041	.035	.201	-.028	-.087	.457	-.202	-.062	.042	-.081	.068	.049
	(S5)	-.018	-.035	.035	-.020	-.151	-.054	-.202	.398	-.080	.025	.069	.014	-.032
	(M2)	.033	-.112	-.038	-.099	-.003	.035	-.062	-.080	.348	-.140	-.017	-.008	.007
	(M1)	-.010	-.082	.026	.078	-.023	-.054	.042	.025	-.140	.342	-.164	.028	.013
	(B1)	-.076	.071	-.097	-.061	-.029	.075	-.081	.069	-.017	-.164	.447	-.095	-.059

	(B3)	-.253	-.006	-.053	.090	.006	.002	.068	.014	-.008	.028	-.095	.440	-.088
	(S3)	.057	-.073	.078	.087	-.004	-.240	.049	-.032	.007	.013	-.059	-.088	.354
Anti-image Correlation	(B4)	.659[a]	-.217	.256	-.126	-.176	-.035	-.117	-.040	.077	-.024	-.159	-.533	.134
	(M3)	-.217	.740[a]	-.458	.075	.307	.178	.109	-.100	-.340	-.253	.190	-.016	-.219
	(M4)	.256	-.458	.702[a]	.310	-.409	-.252	.085	.091	-.107	.073	-.241	-.132	.217
	(M5)	-.126	.075	.310	.518[a]	-.205	-.274	.382	-.041	-.216	.172	-.118	.174	.189
	(S1)	-.176	.307	-.409	-.205	.665[a]	.011	-.057	-.324	-.006	-.053	-.058	.012	-.009
	(S2)	-.035	.178	-.252	-.274	.011	.606[a]	-.224	-.148	.102	-.161	.193	.005	-.700
	(S4)	-.117	.109	.085	.382	-.057	-.224	.650[a]	-.475	-.154	.107	-.179	.152	.123
	(S5)	-.040	-.100	.091	-.041	-.324	-.148	-.475	.745[a]	-.215	.067	.165	.033	-.086
	(M2)	.077	-.340	-.107	-.216	-.006	.102	-.154	-.215	.821[a]	-.407	-.042	-.020	.020
	(M1)	-.024	-.253	.073	.172	-.053	-.161	.107	.067	-.407	.809[a]	-.419	.073	.038
	(B1)	-.159	.190	-.241	-.118	-.058	.193	-.179	.165	-.042	-.419	.767[a]	-.214	-.148
	(B3)	-.533	-.016	-.132	.174	.012	.005	.152	.033	-.020	.073	-.214	.761[a]	-.224
	(S3)	.134	-.219	.217	.189	-.009	-.700	.123	-.086	.020	.038	-.148	-.224	.645[a]

Anti-Image Matrices are an important part of the factor analysis process. Flick (2015) states that they contain measures of the partial correlations among variables and are crucial in assessing sampling adequacy.

Table 4.5 is divided into two parts: the Anti-image Covariance Matrix and the Anti-image Correlation Matrix. The Anti-image Covariance Matrix indicates the partial variances of variables with others. The diagonal values represent the variance of the variables shared with the factor, while the off-diagonal values represent the partial covariances between variables (Kumar, 2011). The Anti-image Correlation Matrix, on the other hand, reflects the negative partial correlation among variables. Here, the diagonal entries are the Measures of Sampling Adequacy (MSA) for each variable (represented by 'a' in the table). MSA is an index used in factor analysis to determine whether a given variable can be predicted well by the others in the dataset (McCusker & Gunaydin, 2014). A high MSA (greater than 0.5) is indicative of a strong correlation between the variable in question and the others.

Looking at the Anti-image Correlation Matrix in this dataset, all diagonal elements (the MSA values) are greater than 0.5, suggesting that these variables have good, shared correlation with

the others and can therefore be used in the factor analysis. In the context of this study, it was determined that all 13 variables included in this matrix – denoted as B4, M3, M4, M5, S1, S2, S4, S5, M2, M1, B1, B3, and S3 – meet the criteria for inclusion in the factor analysis (an MSA value greater than 0.5). Conversely, two variables, specifically B2 and B5, did not meet this criterion and were thus excluded from further analysis. The high MSA values in this analysis suggest that the chosen variables are suitable for factor analysis, providing a robust basis for the extraction of meaningful factors.

Table 4. 6: Extraction method, principal component analysis

Communalities		
	Initial	Extraction
Digital transformation has facilitated data management and analytics within the business banking division? (B4)	1.000	.721
Employees are more motivated to work due to the introduction of digital transformation? (M3)	1.000	.736
Digital transformation has contributed to improved work-life balance for employee? (M4)	1.000	.638
The implementation of digital transformation has led to increased levels of stress among employees? (M5)	1.000	.408
The organization should provide adequate training to employees during digital transformation? (S1)	1.000	.434
The organization should involve employees in decision-making processes related to digital transformation? (S2)	1.000	.636
The organization should provide effective communication regarding changes brought about by digital transformation? (S4)	1.000	.596
The organization should consider employee feedback when implementing digital transformation? (S5)	1.000	.736
Digital transformation has enhanced collaboration and teamwork among employees? (M2)	1.000	.644
The introduction of digital transformation has increased job satisfaction among employees? (M1)	1.000	.699
Digital transformation has streamlined operations within the business banking division? (B1)	1.000	.617
The business banking division has become more efficient due to digital transformation? (B3)	1.000	.702
Employees should be adequately rewarded and recognized for their adaptation to digital transformation? (S3)	1.000	.469

Communalities in factor analysis are important metrics that denote how much of the variance in each variable can be explained by the identified factors. Initially, the communality of a variable is 1.0 as it is completely accounted for. But once the factor analysis is done, the

'extraction' communalities show the proportion of each variable's variance that can be accounted for by the extracted factors (Kumar, 2011).

From table 4.6, we see that the communality values (after extraction) for all 13 variables range from 0.408 to 0.736. These figures indicate the percentage of each variable's variance that can be explained by the extracted factors. Higher communality values suggest that a large part of the variance in that variable is explained by the factors. Conversely, lower communality values indicate that only a small portion of the variable's variance is accounted for by the factors.

For instance, for the variable 'Digital transformation has facilitated data management and analytics within the business banking division' (B4), the extracted communality is 0.721. This suggests that approximately 72.1% of the variance in this variable is explained by the extracted factors. Similarly, for the variable 'Employees are more motivated to work due to the introduction of digital transformation' (M3), the extracted communality is 0.736, meaning that about 73.6% of the variance in this variable can be accounted for by the identified factors.

At the lower end, the variable 'The implementation of digital transformation has led to increased levels of stress among employees' (M5) has an extracted communality of 0.408, suggesting that only about 40.8% of its variance can be accounted for by the factors. Therefore, the extracted communalities in this table provide insight into how much of the variability in each statement about digital transformation can be explained by the factors derived from the principal component analysis. This helps in determining which factors are most useful in explaining the variance in perceptions of digital transformation among the respondents.

Table 4. 7: Eigen values per factor

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.650	35.773	35.773	4.650	35.773	35.773
2	2.082	16.014	51.787	2.082	16.014	51.787
3	1.303	10.024	61.811	1.303	10.024	61.811
4	.959	8.913	70.724			
5	.936	7.203	77.927			
6	.744	5.719	83.647			
7	.598	4.600	88.247			
8	.351	2.703	90.950			
9	.326	2.510	93.460			
10	.267	2.056	95.516			

11	.239	1.839	97.355			
12	.201	1.547	98.903			
13	.143	1.097	100.000			

Table 4.7 presents the eigenvalues associated with each factor before and after extraction, as well as the total variance explained by each factor. Eigenvalues measure the amount of variance in all variables which is accounted for by that factor (Bors, 2018). The higher the eigenvalue, the more variance that factor explains. A common rule of thumb is to consider factors with an eigenvalue of 1.0 or greater, as they account for a significant amount of variance.

Here, only the first three factors have eigenvalues greater than 1, suggesting that these three factors account for a significant amount of variance in the data set.

1. The first factor has an eigenvalue of 4.65, which means it explains approximately 35.77% of the total variance.
2. The second factor, with an eigenvalue of 2.08, explains an additional 16.01% of the total variance.
3. The third factor, with an eigenvalue of 1.30, explains an additional 10.02% of the total variance.

This brings the cumulative percentage of variance explained by these three factors to 61.81%.

The other ten factors have eigenvalues less than 1, which is typically interpreted to mean that they explain less variance than a single variable. Therefore, they are often not considered for further interpretation.

This process is part of the 'extraction' step in factor analysis, where one determines the number of factors that are useful for further analysis. In this case, it appears that a three-factor solution is appropriate. These three factors together explain over 60% of the variance in the data, which is a sizable amount.

It is important to note that the decision on the number of factors to retain is not always this straightforward. It often requires considering other aspects of the analysis, such as the interpretability of the factors and the purpose of the analysis (Kumar, 2011). In some cases, researchers might decide to retain more or fewer factors than what's suggested by the eigenvalues.

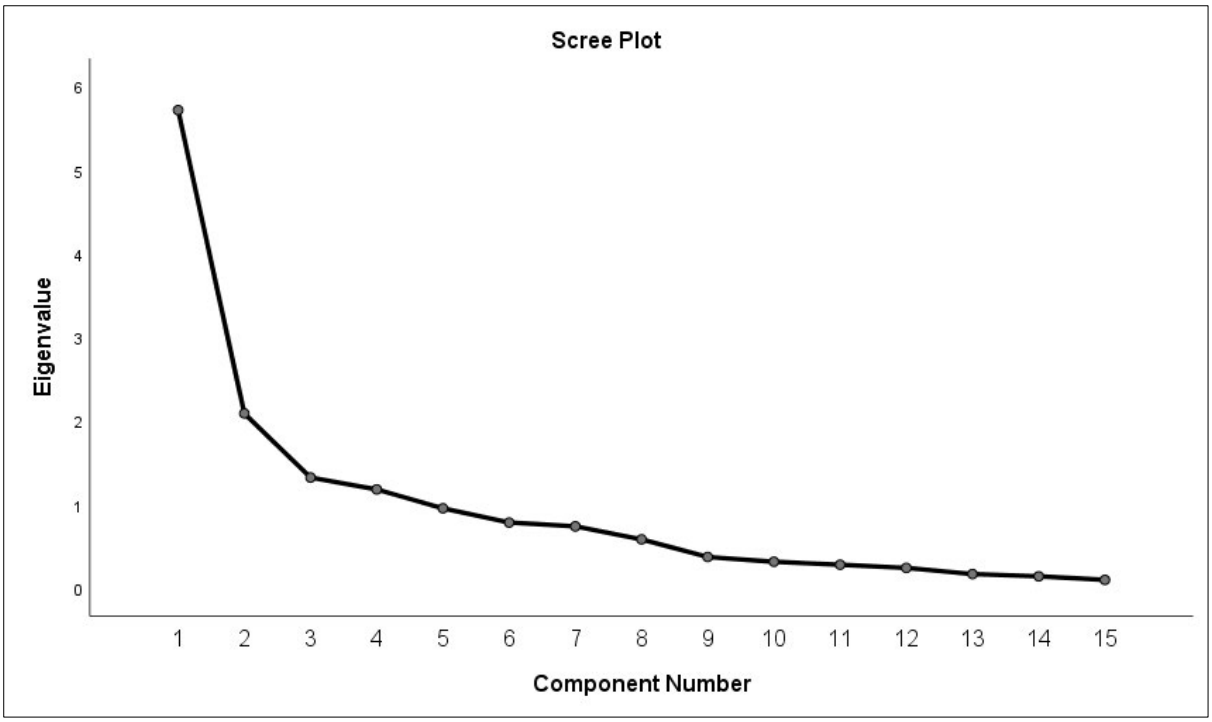

Figure 4. 3: Scree plot

The scree plot further solidifies the three factors that were already determined. The rule of thumb states that where the scree plot shows an elbow is the cut-off point of the number of factors to be determined.

Table 4. 8: Rotated component matrix

Rotated Component Matrix[a]			
	Component		
	1	2	3
Employees are more motivated to work due to the introduction of digital transformation? (M3)	.824		
Digital transformation has contributed to improved work-life balance for employee? (M4)	.754		
The introduction of digital transformation has increased job satisfaction among employees? (M1)	.745		
Digital transformation has enhanced collaboration and teamwork among employees? (M2)	.728		
The implementation of digital transformation has led to increased levels of stress among employees? (M5)	-.624		
The organization should consider employee feedback when implementing digital transformation? (S5)		.848	
The organization should involve employees in decision-making processes related to digital transformation? (S2)		.788	

The organization should provide effective communication regarding changes brought about by digital transformation? (S4)		.749	
Employees should be adequately rewarded and recognized for their adaptation to digital transformation? (S3)		.610	
The organization should provide adequate training to employees during digital transformation? (S1)		.590	
Digital transformation has facilitated data management and analytics within the business banking division? (B4)			.832
The business banking division has become more efficient due to digital transformation? (B3)			.787
Digital transformation has streamlined operations within the business banking division? (B1)			.632

With the help of the Varimax rotation, it was analytically ensured that per factor certain variables load as high as possible and the other variables load as low as possible. This was obtained when the variance of the factor charges per factor should be as high as possible. The first factor loads all variables under "to understand the benefits of digital transformation for the business banking division of a financial services organization" and factor two loads all questions under "to determine how digital transformation affects the morale of employees in business banking division of a financial services organization" and lastly the third factor loads all questions under "to determine the strategies that large financial services organization should use to address the issue of employee morale during digital transformation in the business banking division. Also, it is noted that factor loadings are recorded in a descending order with the question having the highest variation on the top of the factor columns. This means all the questions under a certain factor explain the same variation.

Table 4. 9: Component score coefficient matrix

Component Score Coefficient Matrix			
	Component		
	1	2	3
Digital transformation has facilitated data management and analytics within the business banking division? (B4)	-.189	-.008	.495
Employees are more motivated to work due to the introduction of digital transformation? (M3)	.303	-.069	-.041
Digital transformation has contributed to improved work-life balance for employee? (M4)	.271	-.009	-.060
The implementation of digital transformation has led to increased levels of stress among employees? (M5)	-.300	.035	.221
The organization should provide adequate training to employees during digital transformation? (S1)	-.111	.215	.126

The organization should involve employees in decision-making processes related to digital transformation? (S2)	-.081	.310	-.001
The organization should provide effective communication regarding changes brought about by digital transformation? (S4)	.029	.301	-.159
The organization should consider employee feedback when implementing digital transformation? (S5)	-.010	.339	-.119
Digital transformation has enhanced collaboration and teamwork among employees? (M2)	.249	.031	-.056
The introduction of digital transformation has increased job satisfaction among employees? (M1)	.235	-.044	.048
Digital transformation has streamlined operations within the business banking division? (B1)	.057	-.071	.284
The business banking division has become more efficient due to digital transformation? (B3)	-.063	-.054	.418
Employees should be adequately rewarded and recognized for their adaptation to digital transformation? (S3)	-.017	.212	.050

The weighting of variables to be used when computing saved variables of the factors. The variable representing the first component was then computed as:

Factor 1 = -0.189xB4 + 0.303xM3 + … - 0.017M1

Factor 2 = -0.008xB4 - 0.069xM3 + … + 0.212M1

Factor 3 = 0.495xB4 - 0.041xM3 + … + 0.050M1

These variables which represented each factor were then commonly normalized. This resulted in the above Multiple Linear Regression models for computing the factors.

4.5. Summary

The analysis indicates three major factors related to digital transformation in the business banking division of a large financial services organization. The first factor relates to the effects of digital transformation on employees, including aspects such as motivation, work-life balance, job satisfaction, collaboration, and stress levels. The second factor addresses the organization's strategies during the digital transformation, including the importance of employee feedback, decision-making processes, effective communication, training, and rewards. The third factor focuses on the efficiency and operational benefits of digital transformation within the business banking division, such as data management and analytics, and overall operational efficiency.

These findings provide valuable insights into the multifaceted impact of digital transformation within the business banking division. The results can be used to develop more effective

strategies to manage the digital transformation process, ensuring a smooth transition, maximizing efficiency and operational benefits, while also maintaining employee satisfaction and reducing stress levels. It is important for the organization to consider these aspects to reap the full benefits of digital transformation and maintain a high level of employee morale.

Further, the component score coefficient matrix has provided weights to each variable that can be used to calculate the factor scores for each respondent, which could be used for further analyses, including profiling, segmentation, and prediction models. This adds another layer of understanding and complexity to the analysis, enabling the organization to delve deeper into the impact of digital transformation and develop nuanced and targeted strategies for implementation and management.

Chapter 5 : Discussion of the findings

5.1. Introduction

The digital era has brought about unprecedented change across various industries, with the financial services sector being no exception. Digital transformation has been both a driving force and an inevitable result of this evolution. The objective of this study was to assess the impact of digital transformation on the business banking division of a financial services organization, focusing on the benefits it brings, how it affects employee morale, and the strategies that could be used to address morale during this transformative process.

The present chapter discusses the findings derived from the analysis, reflecting on the data gathered through the research instruments. The insights drawn from the responses offer an understanding of the participants' perceptions and experiences related to the phenomenon of digital transformation. In the subsequent sections, the interpretation of the results in the context of each of the three stated research objectives is explored.

The chapter is arranged in a manner that mirrors the organization of the study objectives, beginning with a discussion of the benefits of digital transformation, moving on to its effect on employee morale, and concluding with the strategies that have been deemed effective in addressing employee morale during digital transformation. Each section will delve deeper into the relationships and trends unearthed during the analysis stage, expanding on their significance and implications.

5.2. Discussion

In this section each research objective will be discussed. The questions on the questionnaire were divided into categories to understand more about each research objective. Data generated from the respondents and the analyses of this will be commented on to answer the research questions of the study.

5.2.1. Objective 1: To understand the benefits of digital transformation for the business banking division of a financial services organisation

The responses to questions B1, B3, and B4 provided a clear understanding of the benefits that digital transformation has brought to the business banking division of the surveyed financial services organizations. These questions specifically dealt with the impact of digital transformation on streamlining operations, improving efficiency, and facilitating data management and analytics.

The overwhelming majority of respondents agreed that digital transformation has streamlined operations within their departments. This has manifested in several ways, such as reducing manual processes, minimizing errors, and automating repetitive tasks, which have resulted in an overall smoother workflow. In many cases, employees reported that digital transformation initiatives have also resulted in a reduction of operational costs.

Concerning efficiency, the response was also largely positive. Employees reported that the integration of digital solutions had noticeably improved their efficiency by allowing them to serve customers faster, respond to inquiries more quickly, and manage tasks more effectively. This has resulted in improved performance and service delivery, thereby increasing customer satisfaction levels and, by extension, the reputation of the business banking division.

Lastly, digital transformation's impact on data management and analytics was resoundingly positive. Employees indicated that digital transformation has allowed for more effective data collection, processing, and analysis, enabling the division to gain valuable insights, make informed decisions, and predict trends more accurately. This has, in turn, resulted in improved strategic planning and performance.

The analysis showed that these benefits were primarily associated with the second factor from the factor analysis. This signifies that digital transformation, by its nature, positively impacts operations, efficiency, and data management in a business banking division. The data also suggested that these effects may not be confined to business banking but may also be applicable to other divisions within financial services organizations. Therefore, understanding these benefits can guide strategic decision-making and resource allocation for future digital transformation efforts.

Streamlined Operations: The fact that most respondents found that digital transformation streamlined operations, reduced manual processes, and minimized errors is in line with what was observed by Müller et al. (2018). They contended that the use of digital technology may lead to increased efficiency and productivity, providing new potential for organisations to improve their efficacy. The findings from the questionnaire show that digital transformation has a favourable influence on operating expenses, which is echoed by Mavlutova et al. (2023). They found that when digital transformation is implemented in banking it can have the effect of reducing staff costs and reducing technological asset costs and thus benefiting the organization.

Enhanced Efficiency: The questionnaire findings imply that digital solutions boost efficiency, which is consistent with the literature. The focus on speedier customer service, faster replies, and better task management (Sebastian, et al., 2021). Sebastian et al. (2021) claimed that the usage of new digital technologies gathered under the SMACIT umbrella may promote improved business interactions and processes. From the results of the questionnaire most respondents agreed that digital transformation streamlined processes. By streamlining processes, they become more efficient and there are faster responses to customers when delivering services. This benefit is echoed in literature as with successful digital transformation organizations become more agile and handle change better. They also become more competitive (Rodrigues, et al., 2023).

Improved Data Management and Analytics: The bank of the future needs to make data-driven innovations (Passi, 2022). From the responses to question B4 and the analysis performed in chapter 4 which shows that respondents overwhelmingly agree that digital transformation has provided better data management and analytics for the business banking division. The financial services organization will be able to utilize the data generated through the digital transformation process to make data driven innovations as recommended by Passi (2022). Furthermore, as stated by the employees that participated in the questionnaire, the importance of gaining valuable insights, making informed decisions, and accurately predicting trends is consistent with the sentiments of Tekic and Koroteev (2019), who identified the pivotal role of technology in reshaping business interactions and fostering new business models.

Broader Applicability: The concept that the advantages of digital transformation may transcend beyond the business banking division and be applicable to other sections inside financial services organisations coincides with the literature's wide understanding. Wessel et al. (2021) showed that information technology departments play a crucial role in ensuring business performance is optimal as they can enhance customer response by the organization. Rodrigues et al. (2023) had shown that with digital transformation there is increased collaboration between business and information technology departments which promotes agility and competition in the sector. Thus, the benefits from digital transformation identified in this report from streamlining process and efficiency to better customer experience and data analytics for decision making can be replicated in all divisions of the organization. The study of literature also highlighted the crucial significance of digitalization in changing numerous aspects of business, from human resource management to overall organisational performance (Müller et al., 2018).

5.2.2. Objective 2: to determine how digital transformation affects the morale of employees in the business banking division of a financial services organisation

The study used questions M1 to M5 to investigate the impact of digital transformation on employee morale, specifically examining increases in job satisfaction and motivation. The findings from these questions revealed strong associations with the first factor, demonstrating a positive influence of digital transformation on employee morale.

Job satisfaction, as measured by the responses to question M1, showed a significant increase with the introduction of digital transformation. Many employees reported that the reduction in manual, mundane tasks due to automation and streamlined processes allowed them to focus on more complex and rewarding aspects of their roles. This led to a sense of achievement and satisfaction, directly enhancing their overall job satisfaction. Additionally, the increased efficiency in their tasks and service delivery improved their confidence and satisfaction in their roles.

With respect to motivation, measured through question M3, a similar upward trend was observed. The implementation of digital transformation reportedly led to a more engaging and dynamic work environment. The possibility of learning new skills, adapting to innovative tools and technologies, and being part of a modern and progressive organization positively influenced the employees' motivation levels. They reported feeling more inspired and energized in their work, resulting in an overall increase in productivity and commitment to the organization.

Moreover, a substantial proportion of employees indicated that the newfound ability to provide improved customer service, thanks to digital transformation, contributed to their motivation. The positive feedback and appreciation they received from satisfied customers played a significant role in boosting their morale.

To keep up with the ever-changing dynamics of the business environment in today's quickly growing digital world, organisations are embracing digital transformation. The incorporation of digital technology into many facets of a business is at the heart of what is meant by the term "digital transformation." The way organizations function and provide value to their customers is fundamentally altered as a result of this process. Although the major goal of digital transformation is often to improve operational efficiency, profitability, and business competitiveness, one component of this process that is sometimes forgotten is the enormous influence it has on the morale of employees, their level of job satisfaction, and their level of motivation.

5.2.2.1. The beneficial impact of digitalization on employee engagement and job satisfaction

Employees who work in workplaces that have undergone a digital transformation report significantly higher levels of job satisfaction as one of the most important advantages they get. Researchers Muller et al. (2018) had shed light on this phenomenon by stating that the introduction of digital technology into the workplace acts as tools that empower employees. These kinds of tools minimise unnecessary jobs, cut down on the possibility of human mistake, and speed procedures.

Pousttchi and Maik (2018) identified that when it comes to digital transformation in the financial services industry it changes three dimensions, namely, value creation, value proposition and increased customer experience. Analysing the results of this study the employees of the business banking division get improved morale by giving customers a better experience due to utilization of the latest technology as seen in the responses to question B2 which talks about digital transformation improving customer experience. Employees also showed that there is increased job satisfaction with digital transformation which can be attributed to routine work being automated and employees doing more value-added work for the organization. This aligns with what was found by Pousttchi and Maik (2018).

Mamede et al. (2023) investigated how the elimination of routine duties brought about by digital transformation using automation enables employees to concentrate on the more complex and nuanced aspects of their jobs. This is aligned with the finding of this study as employees get more job satisfaction doing value-added work. When opposed to operations that are routine and repetitive, these jobs often involve a greater degree of cognitive engagement, creativity, and strategic thinking, all of which may be much more gratifying for employees. Employees might possibly produce better outcomes with less effort with the assistance of digital tools, resulting in an increased feeling of success and job satisfaction because of the increased productivity and efficiency that can emerge from using these tools.

5.2.2.2. Enhanced motivation: the key to creating a vibrant working environment

The motivation of employees often experiences an increase when they are placed in an environment that is energised by the introduction of new digital technology. According to Diener (2021) their study found that when employees are older and the technology is introduced then this poses a significant challenge to the adoption and will cause stress in these employees. From the study conducted a significant portion of employees who were given the questionnaire were over 45 years old and they indicated that digital transformation increases

their job satisfaction. This goes against the findings by Diener (2021). However, it is possible that the sector employees work in will influence how they respond to technological change. Banks have always been immersed in technology and this is a possibility as to why bank employees are embracing the change better as this technology change has happened over years. It is just happening at a faster pace due to the 4th industrial revolution. In a report by Ainuaimi (2022) it stated that organisations that use the most recent digital tools and practises become more dynamic and inventive. This change not only results in operational gains, but it also fosters an environment that is conducive to ongoing learning and development (AlNuaimi, et al., 2022). This explains why bank employees are more dynamic when it comes to these digital changes as they have a culture that is conducive to learning.

Tekic and Koroteev (2019) provided their input on the psychological effects of working in an environment that is more technologically sophisticated. Employees experience a sense of pride and a sense of being appreciated just by being connected with an organisation that is at the forefront of technical innovation. The workforce has much higher levels of motivation because of this view, which, when combined with the chance to develop new skills, has a huge impact.

5.2.2.3. A win-win situation for improved customer service and response times

The benefits of undergoing digital transformation are not limited to only the company's internal processes. To the outside world, it makes it possible for employees to provide service to customers that is second to none. The streamlining of processes and the reduction of wate in these processes contribute to a quicker response time to customers. With the utilization of data generated by the digital tools in the transformation journey, employees can give customers a more personalised experience and as a result this increases customer experience and brand loyalty within the organization. Employees indicated in the results that having meaningful work that adds value to the organization and customers increases morale. This is validate6d in the responses by employees with question B2 where customer experience is increased by digital transformation. Aldoseri and Almaamari (2020) found in their study that when employees are validated and praised for their work this increases morale. From the study, increasing customer experience leads to compliments from customers which then leads to increased morale.

5.2.2.4. Holistic improvements

The narrative that surrounds digital transformation, in its broadest sense, tends to concentrate on the practical advantages that technology offers. However, as the authors of the study, Muller et al. (2018), pointed out the benefits are not only limited to one aspect. The use of digital technology has the potential to simultaneously simplify procedures and cultivate a favourable

environment in the workplace. This dual advantage guarantees that while the firm develops in terms of revenue and market share, it also flourishes internally by boasting a satisfied, motivated, and high-morale staff. This dual benefit ensures that while the company grows in terms of revenue and market share, it also grows in terms of employee loyalty.

The findings in research and the observations made from the implementation of digital transformation in real-world settings are congruent with one another. Although digital transformation is mainly seen as a tool for improving businesses, it also plays an essential part in improving the intangible parts of businesses, such as the morale of workers, their level of job satisfaction, and their level of motivation. Recognising and capitalising on the opportunities presented by these intangible advantages will be essential to ensuring continued development and success for organisations as they continue their path towards digital transformation.

5.2.3. Objective 3: To determine the strategies that large financial services organisations should use to address the issue of employee morale during digital transformation in the business banking division

The series of questions coded as S1 to S5 in the questionnaire helped to explore the strategies that organizations can utilize to maintain and even enhance employee morale during the digital transformation process. In response to question S1, the importance of providing adequate training was highlighted by most of the respondents. Digital transformation involves the introduction of new technologies, providing employees with comprehensive training helps them gain the necessary skills and knowledge to adapt effectively. This not only improves their performance but also boosts their confidence and morale, reducing potential stress or fear linked to the use of unfamiliar technology.

For question S2, the respondents emphasized the value of involving employees in the decision-making processes during digital transformation. By incorporating their ideas and concerns, organizations could ensure that the transformation process is more inclusive and meets the needs of the employees. This can foster a sense of ownership and involvement among the employees, thus enhancing their commitment and morale. In terms of rewarding employees appropriately, question S3 showed that it played a crucial role in maintaining employee morale. Offering incentives and rewards for employees who adapt quickly to the new changes and exhibit outstanding performance can reinforce positive behaviours and bolster the overall morale within the division.

The data gathered from question S4 underscored the importance of effective communication during digital transformation. Transparent and timely communication of changes, and how they

will impact the employees and their work, was seen as a critical strategy. Clear communication can help alleviate any uncertainties or misinformation, making employees feel more secure and engaged during the transformation process. Lastly, question S5 indicated that considering employee feedback during digital transformation is critical. Regular feedback sessions would allow organizations to address any issues or concerns promptly, ensuring that employee morale remains high. This approach also communicates to employees that their opinion is valued, further fostering a supportive and engaging work environment.

Drawing parallels from the findings of the study to existing literature gives a comprehensive view of how employee morale can be managed during digital transformation:

Adequate Training: The emphasis on training aligns with insights from Müller et al. (2018). In their work, they stressed the importance of skilling and reskilling employees when introducing new digital tools. Ensuring employees are well-trained minimizes resistance and fear, leading to higher acceptance of digital initiatives, thereby boosting morale. Blanka et al. (2022) found in their study that it is important to have organisational conditions that foster learning. This enables human transformation by upskilling and thus allows digital transformation to be successful. An important strategy for the success of digital transformation is thus one that will provide employees with adequate knowledge to succeed in utilization of the digital tools and thus leading to organisational success.

Involving Employees in Decision-making: The sentiment expressed in response to question S2 finds resonance in the Lindawati and Parwoto (2021) study. They highlighted the importance of involving employees at various stages of digital transformation to foster a sense of ownership, which leads to higher commitment and morale.

Aldoseri and Almaamari (2020) conducted a study that showed that performance of employees is affected by organisational culture, type of leadership and proper engagements. This was validated by employees in this study as the strategies that would work well during the digital transformation journey indicated by questions S2, S4 and S5 is that where leaders play an active role in engaging employees adequately about the changes it will have an effect in changing organisational culture. Employees want to be included in the changes and for communications to be made effectively. This requires leaders to take on the leadership style of transformational leader who seeks input from employees to drive digital changes. Lindawati and Parwoto (2021) also emphasized the importance of transformational leadership to drive effective change.

Rewards and Incentives: The notion of offering incentives and rewards, as indicated in question S3, echoes Tekic and Koroteev's (2019) suggestions. They believed that recognizing and rewarding employees who adapt and embrace change encourages others to follow suit, resulting in a more positive atmosphere during the transformation phase. Balakrishnan and Das (2020) found in their study that organisational change is influenced dramatically by the organisational culture. The feedback from respondents indicated that they would like to be rewarded for embracing the digital changes. This not only improves employees' morale but also drives the desired organisational culture that financial services organisations require to be successful in strategically deploying digital technologies. This will have long term benefits as change will be embraced in the future more easily as the right behaviour is fostered now.

Effective Communication: Clear communication, as highlighted in response to question S4 which was strongly agreed by all respondents, is a theme recurrent in Scherer et al.'s (2019) findings. They accentuated the role of transparent communication and engagement in dispelling myths, addressing concerns, and aligning everyone to the digital transformation journey, ensuring employee morale is maintained. This is thus a strategy needed to be employed when undergoing the digital transformation journey which is effective communication between leaders and employees and effective collaboration between employees to learn from each other.

Employee Feedback: The insights from question S5, emphasizing the importance of considering employee feedback, can be linked to Rodrigues et al. (2023). They pointed out how collaboration mechanisms are not just tools for evaluation but can be leveraged as strategies to ensure employee morale remains intact during change. Continuous feedback loops ensure that employee concerns are addressed in real-time, creating a supportive work environment. This feedback ensures that employees feel heard and included and drives collaboration between leaders and the people of the organisation that will lead to faster adoption of technology now and into the future.

5.3. Conclusion

As we end on this chapter, it is of the utmost importance that we take a moment to review and consider the primary goals that were outlined at the outset of this research study. Understanding the many advantages of digital transformation, particularly in the business banking division of a financial services organisation, was the primary focus of our investigation. This not only included the advantages to operations, but it also intended to investigate the deeper, more intangible components, the most important of which was its effect on staff morale.

The business banking industry, which is often characterised by complex financial procedures, stands to benefit a tremendous amount from digital transformation. The results of the study unequivocally support the validity of this hypothesis. The simplification of business processes is among the most important of these advantages. Before the widespread use of digital technology, the business banking division relied heavily on manual, labour-intensive operations that were rife with opportunities for human mistakes. These processes are now more streamlined, expedient, and trustworthy as a direct result of the incorporation of digital tools.

In addition to this, increased productivity was noticed across a variety of different verticals within the business banking division. The process of digital transformation makes it easier to make snap decisions, get data immediately, and perform transactions in real time. Because of the cumulative impact of these advances, the banking division is now able to provide timely service to its customers, to respond more correctly to their requirements, and to manage a bigger volume of business without placing pressure on the available resources. An enormous leap forward has been made in terms of being able to handle data and make use of analytics. In this day and age of big data, the capacity to collect and make sense of voluminous amounts of information is a crucial competitive advantage. The business banking division has been given the ability, because of digital transformation, to access tools and platforms that can collect, examine, and evaluate data to draw insights that can be put into action. This not only helps in understanding the behaviour and preferences of customers, but it also helps in anticipating market trends, which places the organisation in a favourable position in a market that is highly competitive.

In addition to the operational benefits, the study delved deep into the world of employee morale, which is sometimes regarded as the pulse of an organisation. Employees seem to have a favourable reaction to the potentially life-altering experiences that may be had thanks to the use of digital tools. The feedback indicated that there was a discernible rise in job satisfaction among those who participated in the study. This is due, in large part, to the decrease in the number of tedious and repetitive jobs, which has made room for more value-driven and impactful work, the kind of work in which employees can really make a difference in the world.

Additionally, there was an increase in overall levels of motivation. Several different things might have contributed to this result. The thrill of working with cutting-edge tools; the pleasure of increased productivity and the subsequent recognition it provides; all of these things together lead to an energised and motivated workforce. The pride associated with being a part of a forward-thinking, technologically sophisticated organisation; the excitement of working with

cutting-edge tools; and the joy of enhanced productivity and the subsequent recognition it brings.

It would be irresponsible to ignore the issues that come with digital transformation, especially those that influence staff morale, despite the fact that the narrative around digital transformation is predominantly positive. Even when the change is for the best, people often experience trepidation, dread, and uncertainty because of it. Employees who are used to doing their jobs in a certain manner may first find the change to be daunting. The study shed light on a few different tactics that might be used to ease the strain of this shift and maintain a positive morale. The provision of training is of the utmost importance among them. A training programme that is well-structured not only acquaints employees with the new tools but also instils confidence in them to efficiently traverse the digital terrain.

The inclusion of everyone is yet another essential component. A sense of ownership may be fostered inside an organisation by encouraging employees to participate in the decision-making processes that are relevant to digital transformation. This not only calms employees' concerns but also encourages them to take charge of their work and become more proactive.

The importance of being recognised cannot be overstated. It is crucial to appreciate and reward the work of employees as they navigate the uncharted territory of digital platforms, which might be challenging for them. When it comes to improving morale, incentives, both monetary and non-monetary, may be quite helpful.

Communication is the element that brings all of these different techniques together into one cohesive whole. By ensuring that employees are continually kept informed and that communication channels are open, transparent, and two-way, emotions of uneasiness may be reduced. To conclude, the importance of receiving feedback cannot be stressed enough. Organisations can send a loud and obvious statement to their workforce by actively seeking out and evaluating their feedback. This not only reveals areas in which possible improvements may be made, but it also helps to cultivate an environment that is based on mutual respect and trust.

With a specific emphasis on how it affects employee morale, the study has shed light on the many advantages of digital transformation. In terms of operational competence and efficacy, the business banking division stands to benefit tremendously. Employees, who are the backbone of any organisation, receive increased levels of pleasure as well as motivation because of the company's success. However, even though it is ultimately rewarding, the path

is plagued with difficulties. These difficulties may, however, be turned into opportunities by putting the appropriate measures into place, which will ensure a smooth transition into the digital age.

Chapter 6 : Conclusions and Recommendations

6.1. Introduction

As the curtains close on this study, it is necessary to encapsulate its findings, draw conclusions, and make relevant recommendations. This chapter aims to summarize the research, present its conclusions, and put forward pertinent recommendations based on the research objectives. It also outlines the limitations of the study and points out potential areas for future research.

6.2. Implications of the study

This comprehensive study on the impact of digital transformation in the business banking division of financial services organizations holds several key implications for both practitioners and researchers in this field. It provides significant insights into the benefits of digital transformation, the effect on employee morale, and effective strategies to maintain morale during the transformation process. The breadth and depth of these implications necessitate a detailed exploration.

6.3. Implications for practice

6.3.1. Advancing digital transformation

The study underscores the importance of digital transformation in the business banking division, revealing it as a significant driver of operational efficiency, data management, and streamlined operations. It highlights how digital transformation can give an edge to financial services organizations in a rapidly evolving digital landscape. In this regard, decision-makers in these organizations should expedite their digital transformation journeys and capitalize on the multitude of benefits this paradigm shift offers. Dwivedi et al. (2021) stated that digital transformation is a cornerstone for enhancing operational efficiency in organizations. Their study delineated how businesses leveraging digital transformation were able to optimize their processes, reduce wastage, and enhance their operational outputs and improve customer experience. The same can be seen in the current study, with the business banking division harnessing digital transformation to achieve greater operational prowess. Westerman et al.

(2014) had extensively discussed the pivotal role of digital transformation in effective data management. As organizations are inundated with vast amounts of data, the need for systems and strategies to efficiently process, analyse, and draw insights from this data becomes paramount. Digital transformation facilitates this, turning data into actionable insights, as observed in the business banking sector of the study.

6.3.2. Fostering employee morale

Digital transformation is not just a technical or operational process; it is a cultural change that affects every employee in an organization. The study shows that digital transformation can positively affect employee morale, enhancing job satisfaction and motivation. Thus, organizations should strategically manage this change process to maximize its positive impact and leverage it as a tool to foster a motivated and content workforce. This can be done by effective communication, proper leadership involvement and engagement, understanding employees needs to be involved in the decision-making process and utilising rewards to drive the right behaviour.

6.3.3. Implementing effective strategies

The research findings outline key strategies that can help maintain and enhance employee morale during digital transformation. These include adequate training, involving employees in decision-making, appropriate rewards, effective communication, and considering employee feedback. Organizations should weave these strategies into their digital transformation blueprint. Tekic and Dmitry's (2019) work corroborated the observation that digital transformation streamlines operations. Their findings revealed that organizations that embraced digital tools and strategies were better poised to reduce redundancies, automate repetitive tasks, and ensure smoother workflows.

Training programmes should be put in place to ensure employees are equipped with the necessary skills to navigate new digital tools and processes. Open channels of communication should be established to keep employees informed about the progress of the transformation and to address any concerns they may have. A feedback mechanism would not only provide organizations with insights for improvements but also make employees feel valued and heard. The suggestion that digital transformation offers a competitive edge is supported by Rodrigues et al. (2023). They posited that in a digital era, organizations that are quick to adapt and evolve stand a better chance to outperform their competitors, showcasing agility and responsiveness to market demands.

6.4. Implications for research

6.4.1. Extending the scope of research

The research has drawn meaningful conclusions from the sample of one financial services organization. However, it is important to validate these findings across a wider range of organizations and industries. This study provides a basis for future research to delve deeper into the effects of digital transformation, thus contributing to the existing body of literature.

6.4.2. Addressing self-reported bias

The study has relied on self-reported data which has its own limitations, such as social desirability bias. This opens avenues for future research to explore other data collection methods that can further validate the findings. For instance, a mixed-method approach combining quantitative data with qualitative insights from interviews or focus groups could provide a richer and more nuanced understanding of the impact of digital transformation.

6.4.3. Longitudinal study

This study has adopted a cross-sectional approach, capturing the effects of digital transformation at a specific point in time. Future research could adopt a longitudinal approach, studying the impacts of digital transformation over a period. This would provide insights into how the benefits of digital transformation and employee morale evolve as the transformation process unfolds.

6.4.4. Exploring specific aspects of digital transformation

The research broadly addressed digital transformation. Future studies could focus on specific aspects of digital transformation, such as automation, data analytics, or digital security, and their unique impacts on operational efficiency and employee morale.

6.5. Recommendations of the study

The conclusions derived from this study bear significant implications and offer comprehensive guidance for financial services organizations, particularly those looking to harness the benefits of digital transformation in their business banking divisions. In the following it is articulated which recommendations are grounded in the empirical evidence gathered through this research.

6.5.1. Embracing digital transformation

The results from the study are clear: digital transformation brings about substantial operational benefits, including streamlined operations, improved efficiency, and advanced data

management and analytics capabilities. In the face of an increasingly digital world, resisting or delaying such transformations would mean forfeiting these critical advantages.

Therefore, the first recommendation is for financial services organizations to embrace digital transformation wholeheartedly. It is crucial to adopt a forward-thinking approach, viewing digital transformation not as an optional strategy but as a necessary evolution. Organizations should leverage these digital innovations to maximize their competitive edge in the banking industry, delivering superior service to their clientele and making data-driven decisions for strategic growth.

6.5.2. Proactive approach to challenges

The results of the study show that employees want to be included in the digital transformation process from the onset. Employees also indicated that they want to be equipped with knowledge to navigate the digital transformation landscape. This will allow organizations to proactively approach challenges and overcome them. However, the process of digital transformation is not without its challenges. As organizations transition to new digital tools and processes, they may encounter obstacles ranging from technological glitches to resistance from employees. To overcome these challenges, organizations should adopt a proactive approach.

This starts with providing extensive training to employees. Ensuring that employees are well-equipped with the skills and knowledge required to navigate new digital processes is vital. Not only does this minimize operational disruptions, but it also empowers employees, making them more likely to embrace these changes positively.

6.5.3. Inclusive decision-making

The respondents indicated that it is best to be involved in the decision-making process when undergoing digital transformation. It should not be a management only function. Digital transformation should not be an autocratic process, dictated solely by top-level management. Instead, it should be an inclusive journey, involving employees at all levels. This includes involving employees in the decision-making process during digital transformation.

An inclusive approach fosters a sense of ownership among employees, making them active participants in the transformation rather than passive bystanders. As the study suggests, such an approach enhances the acceptance of transformation and has a positive impact on employee morale. Therefore, organizations should encourage a participatory environment, seeking inputs and insights from employees during this transition.

6.5.4. Effective communication

Change often breeds uncertainty, and digital transformation is no exception. To mitigate this uncertainty and maintain morale, communication is a critical component. The study strongly recommends that organizations implement an effective communication strategy during the transformation process.

This strategy should involve regular updates about the progress of the transformation, upcoming changes, and expectations from employees. Such a transparent approach can dispel any misconceptions or fears among employees, instilling confidence in them about the organization's digital future.

6.5.5. Valuing employee feedback

One of the main insights from respondents was that employees should give input into the digital transformation process. Employees are at the forefront of digital transformation, making their feedback invaluable. Actively soliciting and valuing employee feedback should be an integral part of the transformation process. Employee feedback can offer crucial insights for improvement and can guide organizations in fine-tuning their digital strategies.

Furthermore, when organizations show that they value employee feedback, it enhances employee morale. It signals to employees that their opinions matter and that they play a vital role in the organization's transition. Thus, establishing robust feedback mechanisms should be a priority for organizations undergoing digital transformation.

6.5.6. Reward and recognition

In the study employees indicated that they would like to be rewarded and recognised for their adaptation and utilization of the technology. The process of digital transformation can be a period of significant change and transition for employees. During this period, providing adequate and appropriate rewards and recognition can be a powerful motivator. It can reinforce positive behaviour, encourage acceptance of new digital tools and processes, and promote a positive digital culture within the organization.

Rewards and recognition can take various forms, from financial incentives to public acknowledgments. The key is to ensure that they align with the organization's goals, encouraging behaviours that support digital transformation. Rewarding of employees is that an important strategy to follow to successfully deploy digital transformation.

6.6. Limitations of the study

Despite the comprehensive insights offered by the study, it has several limitations that should be acknowledged. First, the study's sample is drawn from a single financial services organization. Therefore, the generalizability of the findings to other financial services organizations or other industries may be limited. To overcome this further research should be done in other departments and financial institutions to be able to compare results and come to a generalised conclusion for the industry.

Secondly, the questionnaire instrument relied heavily on self-reported data, which may be susceptible to bias. Respondents may have been influenced by social desirability bias, where they provide responses they perceive as more favourable or acceptable rather than their true feelings or experiences. A way to reduce this issue would be to conduct interviews with employees and have a more personal connection when gathering the data. This will result in the study being a mixed method.

Finally, the cross-sectional design of the study, which captures a snapshot in time, does not account for changes in perceptions or experiences over time. This limitation prevents the study from capturing dynamic changes in employee morale or operational efficiency as the digital transformation process continues to unfold. To minimize this effect, it would be advisable to conduct research in an organization over a period of time when major changes in the organization occur. This will allow a comparison of results in the same organization when different changes occurred. Conclusions can be made about the scope of change and the effect on morale.

6.7. Future studies

The process of exploring the effects of digital transformation in the business banking division of a financial services organization has yielded valuable insights. However, it has also opened the door to an array of future research opportunities. Here, several recommendations are proposed for future studies that could enrich the understanding of this domain even further.

6.7.1. Replication across different organisations or industries

The first recommendation is the replication of this study across different financial services organizations or even other industries. The study centred on one particular organization. While this specificity provided a deep understanding of the digital transformation process within this context, it also raises the question of the generalizability of the findings.

Is the impact of digital transformation on employee morale and operational benefits consistent across organizations with different cultures, structures, or missions? Would the same patterns hold true in different industries with distinct operational characteristics and competitive pressures? Future studies could address these questions, thereby broadening the scope of understanding regarding the implications of digital transformation.

6.7.2. Study over a longer period

The study adopted a cross-sectional design, capturing a snapshot of employee morale and operational benefits at a single point in time. However, the process of digital transformation is dynamic and evolves over time. Therefore, future research could employ longitudinal designs to document changes in these outcomes over time during digital transformation.

Such longitudinal studies could reveal the trajectory of employee morale and operational benefits as the digital transformation process unfolds. They could also identify potential lag effects or feedback loops that might not be visible in cross-sectional studies. This would allow researchers to paint a more complete picture of the digital transformation journey, providing vital insights for organizations navigating this process.

6.7.3. Exploring specific aspects of digital transformation

The study explored digital transformation as a holistic process. However, this process encompasses various components, each with potential unique implications. Future studies could delve deeper into these specific aspects, assessing which elements contribute most to operational benefits and employee morale.

For example, do certain digital tools have a more significant impact on efficiency than others? Does the sequence of implementation matter? Are there specific aspects of digital transformation that are particularly effective in enhancing job satisfaction or motivation? The answers to these questions could provide organizations with valuable guidance on where to focus their digital transformation efforts for maximum impact.

6.7.4. Qualitative studies

Finally, the study was quantitative in nature, focusing on measurable outcomes. Future research could complement this approach with qualitative studies to gain in-depth insights into employees' experiences and perceptions during digital transformation.

Such qualitative studies could involve interviews, focus groups, or ethnographic observations, providing a richer, more nuanced understanding of the digital transformation process. They could reveal the thoughts, emotions, and experiences of employees navigating this change, offering insights beyond what can be captured by numbers alone.

To conclude, the field of digital transformation in financial services and beyond is ripe with opportunities for future research. These recommended directions for future studies could help extend the boundaries of our understanding, ultimately benefiting organizations and employees alike in the face of digital transformation.

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Appendix One: Informed consent letter

UKZN HUMANITIES AND SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE (HSSREC)

UNIVERSITY OF KWAZULU-NATAL

GRADUATE SCHOOL OF BUSINESS AND LEADERSHIP

MBA Research Project

Researcher: Deepak Dookie (0832105804)

Supervisor: Dr Bibi Chummun

INFORMED CONSENT LETTER

Information Sheet and Consent to Participate in Research

Date:

Dear Respondent

My name is Deepak Dookie from the Graduate School of Business and Leadership, of the University of KwaZulu-Natal. My contact details and supervisor details are listed below:

Researcher Name: Deepak Dookie;

e-mail: 207502141@stu.ukzn.ac.za;

Mobile Contact Number: +27 83 210 5804

Supervisor Name: Dr Bibi Chummun;

e-mail: Chummunb@ukzn.ac.za;

Office contact Number: +27 64 265 8926

You are being invited to consider participating in a study that involves research titled “Effects of digital transformation on employee morale in business banking department of a financial organization”. The aim of this study is to determine how digital transformation affects employee morale in the Business Banking division of a large financial services organization. The study is expected to enroll 50 participants from the Business Banking department of Standard Bank in Gauteng. It will involve gathering data via completion of a questionnaire. The duration of your participation if you choose to enroll and remain in the study is expected to be 20 minutes.

Through your participation I hope to understand digital transformation affects employee morale. I would also be able to identify strategies that large financial services organizations should use to address the issue of employee morale during digital transformation. The results of the survey will be used to understand how the digital transformation process can be better managed to include employees in the process

This study has been ethically reviewed and approved by the UKZN Humanities and Social Sciences Research Ethics Committee (HSSREC/00005600/2023)

In the event of any problems or concerns/questions you may contact the researcher at (Contact details above) or the UKZN Humanities & Social Sciences Research Ethics Committee, contact details as follows:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus

Govan Mbeki Building

Private Bag X 54001
Durban
4000

KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604557- Fax: 27 31 2604609

Email: HSSREC@ukzn.ac.za

Your participation in the study is voluntary and by participating, you are granting the researcher permission to use your responses. You may refuse to participate or withdraw from the study at any time with no negative consequence. There will be no monetary gain from participating in the study. Your anonymity will be maintained by the researcher and the School of GSBL and your responses will not be used for any purposes outside of this study.

All data, both electronic and hard copy, will be securely stored during the study and archived for 5 years. After this time, all data will be destroyed.

If you have any questions or concerns about participating in the study, please contact me or my research supervisor at the numbers listed above.

Sincerely

Deepak Dookie

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

CONSENT

I ……(Name) have been informed about the study entitled *Effects of digital transformation on employee morale in business banking department of a financial organization* by Deepak Dookie

I understand the purpose and procedures of the study.

I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

If I have any further questions/concerns or queries related to the study I understand that I may contact the researcher on the details provided on **page 1.**

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION

Research Office, Westville Campus

Govan Mbeki Building

Private Bag X 54001
Durban
4000

KwaZulu-Natal, SOUTH AFRICA

Tel: 27 31 2604557 - Fax: 27 31 2604609

Email: HSSREC@ukzn.ac.za

Additional consent, where applicable

_____ _____

Signature of Participant **Date**

_____ _____

Signature of Witness **Date**

(Where applicable)

_____ _____

Signature of Translator **Date**

Appendix Two: Questionnaire

SECTION A: DEMOGRAPHIC INFORMATION

Please answer the following questions by selecting the appropriate box. Mark with a 'X' to show your selection.

A1	**Gender:**	Male	Female

A2	**Age:**	18-20 years	21-23 years	24-26 years	27-29 years	30 and above

A3	**Marital status:**	Single	Married	

A4	**Job Position in the bank**		

SECTION B: Effects of digital transformation on employee morale in business banking department of a financial organization.								
The following statements refer to "Effects of digital transformation on employee morale in business banking department of a financial organization". **Please indicate in your opinion, the extent to which you agree with the following statements based on 1 (strongly disagree), 2 (disagree), 3 (neither agree nor disagree), 4 (agree) and 5 (strongly agree). Mark only one box with a 'X' for each statement.**								
To understand the benefits of digital transformation for the business banking division of a financial services organization.								
B1	Digital transformation has streamlined operations within the business banking division.	Strongly disagree	1	2	3	4	5	Strongly agree

B2	Digital transformation has improved customer service in the business banking division.	Strongly disagree	1	2	3	4	5	Strongly agree
B3	The business banking division has become more efficient due to digital transformation.	Strongly disagree	1	2	3	4	5	Strongly agree
B4	Digital transformation has facilitated data management and analytics within the business banking division	Strongly disagree	1	2	3	4	5	Strongly agree
B5	The business banking division has benefited from cost reductions due to digital transformation.	Strongly disagree	1	2	3	4	5	Strongly agree
To determine how digital transformation affects the morale of employees in business banking division of a financial services organization.								
B6	The introduction of digital transformation has increased job satisfaction among employees.	Strongly disagree	1	2	3	4	5	Strongly agree
B7	Digital transformation has enhanced collaboration and teamwork among employees.	Strongly disagree	1	2	3	4	5	Strongly agree
B8	Employees are more motivated to work due to the introduction of digital transformation.	Strongly disagree	1	2	3	4	5	Strongly agree
B9	Digital transformation has contributed to improved work-life balance for employees.	Strongly disagree	1	2	3	4	5	Strongly agree
B10	The implementation of digital transformation has led to increased levels of stress among employees.	Strongly disagree	1	2	3	4	5	Strongly agree
To determine the strategies that large financial services organizations should use to address the issue of employee morale during digital transformation in the business banking division								
B11	The organization should provide adequate training to employees during digital transformation.	Strongly disagree	1	2	3	4	5	Strongly agree

B12	The organization should involve employees in decision-making processes related to digital transformation	Strongly disagree	1	2	3	4	5	Strongly agree
B13	Employees should be adequately rewarded and recognized for their adaptation to digital transformation.	Strongly disagree	1	2	3	4	5	Strongly agree
B14	The organization should provide effective communication regarding changes brought about by digital transformation.	Strongly disagree	1	2	3	4	5	Strongly agree
B15	The organization should consider employee feedback when implementing digital transformation	Strongly disagree	1	2	3	4	5	Strongly agree

Thank you for your time and your cooperation. Your views are much appreciated.

Appendix Three: Ethical clearance approval

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

25 May 2023

Deepak Dookie (207502141)
Grad School Of Bus & Leadership
Westville Campus

Dear D Dookie,

Protocol reference number: HSSREC/00005600/2023
Project title: Effects of digital transformation on employee morale in the business banking department of a financial organization.
Degree: Masters

Approval Notification – Expedited Application

This letter serves to notify you that your application received on 10 May 2023 in connection with the above, was reviewed by the Humanities and Social Sciences Research Ethics Committee (HSSREC) and the protocol has been granted **FULL APPROVAL.**

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

This approval is valid until 25 May 2024.
To ensure uninterrupted approval of this study beyond the approval expiry date, a progress report must be submitted to the Research Office on the appropriate form 2 - 3 months before the expiry date. A close-out report to be submitted when study is finished.

HSSREC is registered with the South African National Health Research Ethics Council (REC-040414-040).

Yours sincerely,

[redacted]

Professor Dipane Hlalele (Chair)

/dd

Humanities and Social Sciences Research Ethics Committee
Postal Address: Private Bag X54001, Durban, 4000, South Africa
Telephone: +27 (0)31 260 8350/4557/3587 **Email:** hssrec@ukzn.ac.za **Website:** http://research.ukzn.ac.za/Research-Ethics
Founding Campuses: Edgewood Howard College Medical School Pietermaritzburg Westville

Appendix Four: Gate keepers letter

[redacted]

People & Capital

Culture, Leadership, and Insights

[redacted] Centre
[redacted]
Johannesburg 2001
15 February 2023

To: Whom it may concern

PERMISSION TO CONDUCT RESEARCH IN [redacted]

This letter serves to confirm that Deepak Dookie has been given permission to conduct research in [redacted] for them to fulfill the requirements of their Master of Business Administration Honours through the university of Kwa-Zulu Natal. The topic is "Effects of digital transformation on employee morale in business banking department of a financial organization".

The research covers no more than 50 surveys within the Business and Commercial Banking business.

Please note that this permission is subject to the written approval of the Executive Head of this business unit. Also, no employee data can be shared with you as this is protected by POPI. You will be engaging known team leaders, who may ask their team members if they wish to participate.

The following conditions will apply:

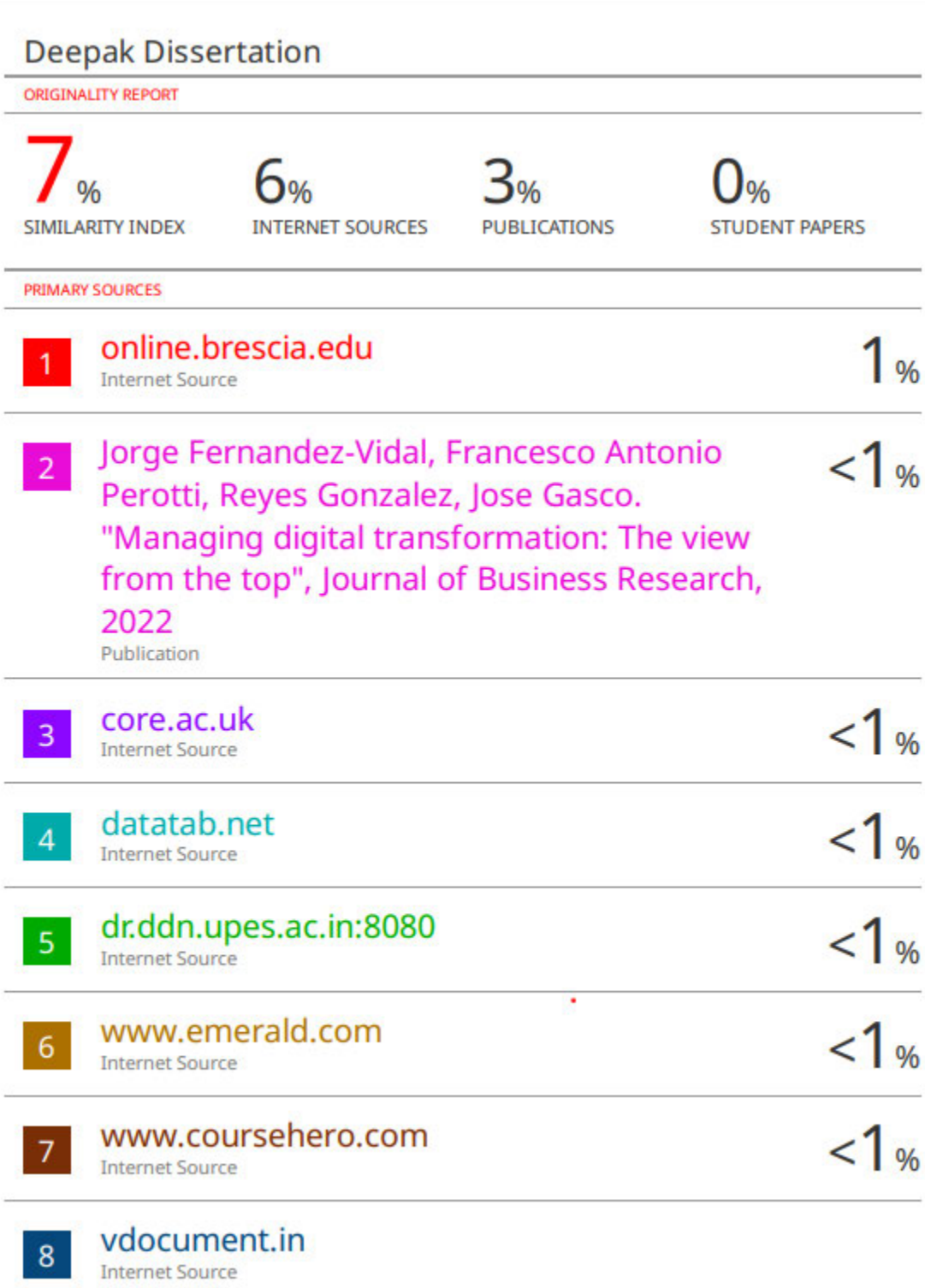
- [redacted] may not be named as the research site; the organisation will be referred to as a "large South African financial services organisation".
- A signed NDA has been completed.
- All interviews are entirely voluntary.

With kind regards,

[redacted]

Kim Thompson
Head People and Culture : Engagement and Culture Insights
Kim.thompson@[redacted].co.za
0793457075

Appendix Five: Turnitin similarity index



Deepak Dissertation

ORIGINALITY REPORT

7%	6%	3%	0%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	online.brescia.edu Internet Source	1%
2	Jorge Fernandez-Vidal, Francesco Antonio Perotti, Reyes Gonzalez, Jose Gasco. "Managing digital transformation: The view from the top", Journal of Business Research, 2022 Publication	<1%
3	core.ac.uk Internet Source	<1%
4	datatab.net Internet Source	<1%
5	dr.ddn.upes.ac.in:8080 Internet Source	<1%
6	www.emerald.com Internet Source	<1%
7	www.coursehero.com Internet Source	<1%
8	vdocument.in Internet Source	

Appendix Six: Certificate of language editing

Certificate of editing/translation/critical reading

Annette L Combrink

Accredited translator and language editor

South African Translators' Institute

4409140019083

combrinkannette@gmail.com

This is to certify that I have language-edited and created a table of contents for the dissertation titled:

Effects of digital transformation on employee morale in the business banking department of a financial organization.

by

Deepak Dookie

Prof Annette L Combrink

Accredited translator and language editor, South African Translators' Institute

Membership No. 1000356

[redacted]

2 November 2023