LEADERSHIP APPROACH TO QUANTITY SURVEYING

By

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ABSTRACT

Professional Quantity Surveyors (QSs) play a leading role in the built environment by managing cost on projects such that the client achieves best value for money. The QS has had a long history where they emerged in England and later established in South Africa and have been renowned for their good work. However as time passed QSs have not met deadlines, and if they did, the quality of work has been substandard. This has brought the reputation of professional QSs into question. Further to diminished reputation the South African economy has been in a decline with the weakening of the rand and the QS profession needs higher profits and growth for organizational success, however this cannot be achieved singlehandedly. The key decision that companies need to make is the adoption of the correct leadership approach which subordinates believe in. This would inspire subordinates to align their personal objectives with that of the organization. This study is aimed at examining leadership and more specifically the two different leadership approaches in quantity surveying: transformational approach compared to a laissez-faire approach. It follows a brief look at the various leadership approaches and then an in-depth examination of the two approaches based on the quantity surveying profession. The research design was quantitative in nature and used Google Forms surveys which was distributed by email to 300 QS professionals in KwaZulu-Natal, with the aid of the South African Council for the Quantity Surveying Profession (SACQSP). The response rate was 65% which was deemed fair to proceed with analysis of the data. A key finding was that the transformational leadership approach strengths in terms of project stages outweighed the laissez-faire approach and that there is a need for QS leaders to adopt this approach moving forward.

Keywords: Leadership, transformational, laissez-faire, quantity surveyor.
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CHAPTER 1

Introduction

1.1 Introduction

The construction sector plays a significant role in the Gross Domestic Product (GDP) of South Africa which is a key indicator of economic performance. The development of infrastructure promotes business growth and is considered by many economists as the heart of the economy (Windapo & Cattell, 2013); (Gornig, Kaiser, & Michelsen, 2015). Prospective developers approach consultancy firms which comprise a multi-disciplinary structure in the built environment. This typically includes professions such as architects, engineers, project managers and quantity surveyors. These firms provide services throughout the project lifespan from conceptual design to construction.

A Quantity Surveyor (QS) is a professional who is primarily responsible for compiling estimates, undertaking value engineering activities, compiling tender documents, cost reporting and ensuring that the project remains within budget. A QSs skills differ at each stage of the project once a tender has been awarded through to project close-out. The execution of the project through the various project phases requires strong leadership commitment. Usman, Said, & Yahaya (2012) further state that the leadership element in every stage is pivotal to success.

This chapter presented the role of the QS in the construction sector and identified the issue concerning poor performance of the profession. The motivation, problem statement, objectives and research questions are identified and the need to adopt the correct leadership approach is the main focus for this chapter.

1.2 Motivation for the study

According to Agyekum, Ayarkwa, & Acheampong (2015), the role of a QS in the construction sector is important and their cost planning, estimating and cost control, rivals estimators from contracting companies. Despite the QS tight control over a clients’ budget, QSs are often heavily criticised by the design team, who may design to impress clients with little or no regard for budget constraint. In order to make the project feasible the QS would need to lead by example and request that the design team adheres to the initial scope of work (Feinberg, 2016).
The QSs role is shown below (Figure 1) within an organogram, depicting the various roles and responsibilities. This sets in place a chain reaction to the overall service rendered. At inception, a client may require advice on project cost feasibility and if the project proceeds, the client may require the QS to manage the project budget to completion (Hee & Ling, 2011).

Figure 1: Quantity surveyors role and responsibilities

Hee & Ling (2011) further state that the lead QS may distribute work according to the professional QSs individual strengths and weaknesses. The lead may adopt a leadership approach based on their qualities, or which suits the team or organisation to achieve the client’s objectives.

Every team has a leader but what qualities define a successful leader? This question is a focal point for organisations as leadership is a key determinant of success. However after many years since its conceptualization, the qualities of successful leadership remains diverse leaving many theories as to which is the best method (Van Beveren, 2017).

According to Spinelli & Adams (2016), successful leaders are an inspiration as they are honest, ethical and fair. Leaders play a vital role in mentoring and developing their
employees. Leaders also have the ability to understand that each client is different and are aware that internal team/individual creativity and innovation is key to outperforming rivals. Spinelli & Adams (2016) further state that research has shown that individuals recognise leaders amongst them by their creativity and their ability to lead when placed within challenging situations.

Companies that grow from a relatively small number of employees to a large number, undergo a process whereby the leader transitions from managing employees to managing managers. The laissez-faire approach is a leading management approach which gives QS professionals freedom to make their own decisions regarding projects with minimal input from leaders. According to Sharma & Singh (2013) the laissez-faire leadership approach is adopted by leaders who are responsible for employees who are highly skilled, experienced and educated similar to professional QS’s, who are required to pass a board exam to obtain ‘professional’ status.

In the build-up to 2010 and the associated infrastructure requirements for the FIFA World Cup, new companies emerged and existing organisations soared to greater heights. Companies entered untapped markets, capitalised on potential market opportunities and maximised profit. Despite the previous success of laissez-faire leadership in the years leading up to the present, 2017 saw economic upheaval and downgrade by Standard and Poor (S&P) and other rating agencies. Recent consultancy company performance has highlighted a significant decrease in growth, more so in the quantity surveying profession where there has been a failure to meet anticipated targets (Akoto, 2016).

“The present is full of confusion – global change, uncertainty, complexity and chaos. The present is not like the past at all. Forty-seven percent of the Fortune 500 companies in 1980 were not on the list 10 years later. They encountered the present and did not survive” Benson (2016, p.48).

Widespread media coverage has highlighted the difficult economic times that the world is facing. The demand for QS services is lower than the supply thereof, thus contributing to the unemployment levels in South Africa. This is a growing concern as the quantity surveying profession accepts graduates annually (Manikas, 2012). The economic slumber has further called for exploration into leadership and the subsequent effect on organisation’s. The selection of a leader with the appropriate skillset to manage an
organisation is crucial to organisational success and should not be overlooked (Christian, Essounga-Njan, & Morgan-Thomas, 2011).

Despite the construction sector being a key contributor to economic growth in South Africa, the QS profession is facing the challenge of reduced opportunities, which has led to higher unemployment levels. Lead QSs have been retrenched, quantity surveying companies have reduced to almost half in size and in some cases, shut down operations completely. This naturally results in the leadership approach of QSs being brought into question.

Firms need to change their leadership approach especially in emerging markets where the environment is relatively unstable and leaders need to be able to adapt to change and manage current market situations (Suk Bong, Kihwan & Seung-Wan, 2017). Pursuing a laissez-faire leadership approach while accepting S&P downgrade status, and reacting thereafter has not worked in favour for the profession nor project delivery. According to Zareen, Razzaq & Mujtaba (2015) and Aulich (2011), the QS sector has major potential and adopting a proactive transformational approach creates awareness of issues that face organisations.

The concept behind transformational leadership is a leader who has a vision and articulates this vision to the organisation, thus streamlining the process of change (Hough et al., 2007). Suk Bong, Kihwan & Seung-Wan (2017) describes transformational leadership as an approach that promotes innovation and boosts organisational performance and project delivery, which is required in the quantity surveying profession.

1.3 Focus of the study

The study is subject to the assumptions outlined below:

- QSs who form part of the sample have relevant exposure to transformational and laissez-faire leadership approach;
- QSs responses will be honest and reflect their opinions on leadership approach, task delivery and organizational performance.
The limitations of the research are as follows:

- Only QS professionals within the KwaZulu-Natal province were used in the sample;
- Only registered professionals who obtained their professional registrations with the South African Council for the Quantity Surveying Profession were used in the sample;
- This research paper focuses on the transformational versus the laissez-faire approach in quantity surveying but acknowledges that there are other leadership approaches which are briefly described in this dissertation.

The ethical considerations taken into account are as follows:

- None of the participants and/or their organisations will be named in the final issue;
- The research will be used for academic purposes only;
- No monetary rewards or gifts were issued for participating in the research and responses were provided on a purely voluntary basis;
- The participants were free to withdraw from the study at any time.
- The completed dissertation will be distributed to all research participants with the vision of the appropriate leadership approach being adopted by industry and forming a platform for further research to be undertaken in other regions;
- The aforementioned considerations were communicated to participants on a consent form. These forms are included in Appendix B.

1.4 Problem statement

The problem statement of this study is as follows:

While a laissez-faire leadership approach may have had successes in the past, to maintain project delivery going forward, a transformational leadership approach is required for the quantity surveying profession.

1.5 Research sub-questions

The hypotheses of this dissertation are:

- Is successful project delivery dependent on adopting the correct leadership approach?
- Are the various stages of construction supported or hindered by the chosen leadership approach?
Do the strengths associated with transformational leadership approach outweigh the strengths of the laissez-faire leadership approach?

What is the preferred leadership approach to the quantity surveying profession?

1.6 Objectives

The primary objective is to examine which leadership approach is best suited for the quantity surveying profession within the South African province of KwaZulu-Natal, either laissez-faire or the transformational approach. The achievement of the primary objective is dependent on satisfaction of secondary objectives, namely:

1. To identify which leadership approach promotes successful project delivery and meets anticipated targets;
2. To assess the impact of the leadership approach against various stages in construction;
3. To determine the key strengths and weaknesses of the laissez-faire versus transformational leadership;
4. To recommend a preferential model in terms of the transformational and laissez-faire leadership.

1.7 Methodology

The methodology applied in this dissertation includes the following:

- The literature review takes into account key research papers that have been published concerning leadership approaches within the QS profession with an aim to highlight shortfalls in the literature.

- This study addressed the lack of effective leadership in quantity surveying in KwaZulu-Natal by examining two key approaches: laissez-faire and the transformational leadership approach. A quantitative research design was used and involved collecting quantitative data from the local market in order to determine the current trends in leadership approach. This will aid in achieving the objectives and provide a conclusion and recommendation that identifies the best suited leadership approach for quantity surveyors within KwaZulu-Natal.

- The sampling method used is convenience sampling. Survey samples was obtained from the quantity surveying companies in KwaZulu-Natal who abide by the regulations of the South African Council for the Quantity Surveying Profession (SACQSP). The
research will exclude estimators and recent graduates who are not registered with the council in order to maintain a high level of data reliability.

- Surveys will be emailed to potential respondents through the SACQSP and the statistical technique used to analyze the data will be descriptive and inferential statistics. Data will then be presented in graphs and pie charts accompanied by an explanation of the data. The Cronbach Alpha method is used for testing reliability of data and the hypotheses will be measured against the accumulated data.

1.8 Chapter outline

Chapter 1: Introduction – This chapter introduced the QS and their role as leaders in the construction sector. Two key leadership approaches were discussed developing the context of the forthcoming chapters and the problem that the research aims to solve was identified. Objectives to enable successful resolution of the problem statement were proposed.

Chapter 2: Literature Review – This chapter explores literature that has been published concerning leadership in the QS profession. For the purpose of this dissertation, literature was obtained from conference papers, journals, textbooks, and previous research dissertations.

Chapter 3: Research Methodology – This chapter describes the research method that was undertaken in order to acquire quantitative data collection from the sample population. Alternative methodologies are explored along with reasons as to why the selected method was chosen for this research study.

Chapter 4: Data Collection and Analysis – This chapter presents the quantitative data obtained from QSs through the aforementioned research method and provides an analysis thereof.

Chapter 5: Conclusion and Recommendation – This chapter concludes the research through evaluation of the outlined objectives. Recommendations for use of this research and future potential research opportunities will be identified herein.
1.9 Summary

This chapter introduced the role of the QS and their involvement in the construction sector. It also highlighted issues that concern the profession and the current leadership approach adopted by most QS leaders. The problem concerning the profession and their recent performance was stated and Chapter 2 explores these issues in detail as well as reviews literature concerning current leadership approaches.
CHAPTER 2

Leadership and the role of the Quantity Surveyor

2.1 Introduction

There is an increasing number of people leaving the workforce due to retirement as opposed to people entering the workforce. In the United States and Europe drastic measures are needed to replace workers in the long term, to sustain overall economic growth (Kapoor, 2011), (Aulich, 2011). According to Khan & Bashar (2016) globalization has opened the doors for the movement of labour however, achieving sustainable growth is a challenge for organizations as immigration laws and regulations are continuously being adjusted as well as office leadership and environments fluctuating.

“People want to be led-not managed; this is why the battle for mind share and talent, time and again, is being won by entrepreneurial leaders. Do you love where you work and whom you work for? Would you recommend it to your best friends and family? Why? There is a familiar ring to the answers; they boil down to the leadership and culture of the company.” Spinelli and Adams (2016, p.195).

According to Agyekum, Ayarkwa, & Acheampong (2015), failure to resolve the leadership issue will result in an inability of local quantity surveying companies to compete internationally. Another issue that is present is the risk of losing more senior professionals to other countries. This has a domino effect on quantity surveying graduates losing potential mentors, which will ultimately reduce the skills and levels of professionalism in the country.

Adopting the incorrect leadership approach in an organization may lead to the use of incorrect applications and tools to try and resolve problems. This in effect may result in delays or cost overruns which is unacceptable as a QSs role by definition is to manage and analyze cost on projects. This ability to analyze costs becomes critical when the QS needs to solve an issue on a particular project. In order to fully identify the risk in the QS field, there is a need to explore and understand the roles of the QS in each stage of the project and how the selected leadership approach affects the performance of the QS and project team (Usman, Said, & Yahaya, 2012).
2.2 The project team

The project team is depicted in Figure 2.1 as follows:

![Project Team Diagram]

Figure 2.1: A typical project team

A typical construction project team would consist of a client who is generally the catalyst for the project, who at inception will approach a project manager or an architect with a concept brief for development. The architect then produces preliminary drawings to the QS to produce a budget estimate at this stage of the project. If the estimate is considered feasible, the client would acquire the services of engineers to complete the design team. Once the design is finalised and the tender is awarded, the contractor would then complete the build aspect of the project with the assistance of subcontractors (Hee & Ling, 2011).

In order to understand the leadership role in the QS professional field, it is necessary to understand their history.

2.3 A brief history of Quantity Surveying in South Africa

The quantity surveying profession was established in 1785 in England where construction costs spiralled and there was a need for some form of cost control. There was initial resistance of the role of QS in construction but they have gained the teams respect over time and clients appreciate insightful feedback (Career Guide, 2017).
The profession later emerged in South Africa when there was a growing need for cost management in the developing construction industry and the South African Council for the Quantity Surveying Profession (SACQP) was subsequently established. While architects and engineers are predominantly responsible for the design of the project, the QS is ultimately responsible for ensuring that the design is within the parameters of a predetermined budget (Career Guide, 2017).

2.4 Stages of a project

The various stages of a project in South Africa is highlighted in Figure 2.2 with the QSs role described in each stage below:

2.4.1 Stage 1: Inception

Brady & Patching (2015) believes that clients are often unaware of a QS services and their value adding component and this is potentially, a lost opportunity. Engaging a QS services at the onset of the project include compilation of high level estimates and would result in significant cost savings. There are several factors that need to be considered at this stage which include but are not limited to, economic factors, financial design criteria and efficiency of design.

a) Economic factors
Due to rising prices of labour and materials on a yearly basis, every project is subject to two types of escalation in South Africa which the QS takes into account while compiling an estimate. Pre-contract escalation is escalation prior to the contract being awarded and is generally calculated by using the Bureau for Economic (BER) indices. Post-contract escalation is for the duration of the project and is calculated using Contract Price Adjustment Provisions (CPAP). Both types of indices are posted by the Medium Term Forecasting (MFA), who publish escalation indices on a quarterly basis for use on various construction projects (Awosina, 2012). A lack of foresight by the lead QS to take into account escalation at the start of the project would lead to inaccurate estimates and a need for additional funds at construction stage.

b) Financial design criteria
According to Hee & Ling (2011), there are several design criteria that determine the feasibility of a project. These include, but not limited to; the type of building material used,
the type of concrete slab, height of building(s) and the municipal zone that the building is in. If for instance, the design was considered too expensive, the QS could then follow a value engineering exercise by substituting cheaper alternative materials whilst not compromising quality or function to ensure the design is within budget. The value engineering exercise can also be applied to each stage of the project provided the QS leader is proactive in this regard. Further to that, options can be proposed to a client and costed by the QS which can determine the parameters of design in some cases. These options could be reviewed by a client and adjusted to meet a client’s design criteria (Agyekum et al., 2015).

c) Efficiency of the design

This aspect of the project relies purely on the design team with input from the QS purely with regards to cost. An example would be the design of a building in relation to ablutions. For instance if the building has a cluster of ablutions then this should be grouped together in order to reduce plumbing costs (Awosina, 2012). Another aspect that the lead QS could consider is the design of the building in terms of life cycle costing which would affect the cost of the building over the lifespan and potentially reduce maintenance costs.

Figure 2.2: Stages in a project
2.4.2 Stage 2: Concept and viability

This stage includes the compilation of a feasibility report prepared by the QS based on the engineers and architects preliminary design and drawings. The feasibility includes an economic, physical and market related feasibility study to determine overall feasibility of the project (Usman, Said, & Yahaya, 2012). A feasibility report is also compiled to bid clients for detailed design covered in the subsequent stages of the project.

If the project is within budget and proves feasible for the client in terms of return on investment or perceived value, the client will give the go ahead for the preceding stages of the project. A client’s perceived value is how he/she determines what the building would be worth to them once completed. It is important to note that if the return on investment for the project is lower than a bank’s interest rate, then it is more feasible and less risky for the client to invest his money in the bank. The lead QS needs to take this point into consideration when deciding what leadership approach to take. A reactive approach could see the loss of a client to competitor QS firms, who may offer the client a greater return on investment or heightened perceived value while undercutting their project fee. It is therefore necessary to be innovative at this stage and offer the client best value for money (Kuzman, 2017).

2.4.3 Stage 3: Design development

Awosina (2012), states that at this stage the design team would produce detailed design drawings to be measured by the quantity surveyor. Co-ordination of disciplines is a key factor at this stage of the project as a lack thereof could lead to additional costs being introduced into the project and scheduling delays. The quantity surveyor could offer insight on the value engineering process whilst maintaining the client’s objectives.

It is important for the QS leader to lead by example and set deadlines for subordinates and the rest of the design team. Failure to meet deadlines by any of the above mentioned impacts the deliverable deadlines to the client negatively and questions the QSs professionalism on a project. A QS leader needs to bear in mind that a client appoints them for their services as professionals in the construction sector and both the QS and design team need to be professional (Usman, Said, & Yahaya, 2012).
2.4.4 Stage 4: Documentation and procurement

This stage includes measurement of Bills of Quantities (BoQ’s) based on architects and engineers tender drawings and the compilation of tender documents. The tender is then advertised for public projects and generally by invitation for private projects. Once the tenders are received, the QS adjudicates and makes a recommendation regarding the appointment of a contractor(s) in the best interest of a client. There are often queries at this stage from the contractor and it is important for a QS leader to provide adequate responses timeously to avoid potential claims arising at a later date (Awosina, 2012).

A QS has to interact with the client and have a ‘hands-on’ approach to leadership. There are various contract types and the QS leader needs to advise the client on the best contract, based on the scope of work. A QS leader also needs to interact with their subordinates and the design team to thoroughly check BoQ’s accuracy in terms of design drawings and specifications (Usman, 2012).

Unfortunately, this is also one of the stages prone to corruption and leadership plays an important part in developing a QSs morals and values. A good QS leader would have vision and know that the firm’s reputation is easily tarnished but difficult to earn and will take necessary precautions and measures to ensure subordinates are well trained in ethical standards (Hee & Ling, 2011).

2.4.5 Stage 5: Construction

This stage is whereby the project is handed over to the contractor to construct. The QS service offering here include monthly site inspections, valuations of work completed on site, payment certificates, cash flows and cost reporting. A key role for a QS is to keep project costs within the overall approved budget, including any variations that do not significantly impact the initial project cost. Significant deviation from the budget would require the lead QS to report to the client and determine innovative ways to bring the project cost in line with the approved budget (Awosina, 2012).

It is also important for a QS leader to acknowledge that no matter the extent of detail on the design teams drawings and specifications, there are almost always unknown’s on site
including hidden services, inclement weather, political turmoil and civil riots. It is therefore necessary for a QS leader to have reasonable contingency on a project, which the client is fully aware and in agreement with.

2.4.6 Stage 6: Close out

This stage sees the close out of the project and involves agreeing the final account with the contractor including any variation orders that would alter the scope of work. Often, this stage neglected by QS leaders resulting in additional time and funds being spent on the project to close out tasks.

Usman (2012) believes that all of the above stages including tasks and services provided, cannot be achieved without effective communication from leaders that govern the smooth transition from instruction to the end product for the client. Aulich (2011) states that QSs need to obtain relevant data from the market, disseminate the information and report accordingly in the various stages of the project life cycle. In order to achieve this, there needs to be clear communication between leaders and subordinates and there needs to be focus on resolving issues in the profession.

2.5 Problems that exist in the QS profession

Warner (2016) states that the Australian Institute of Quantity Surveyors are trying to raise the professional and technical standards of the quantity surveying profession due to non-performance on many aspects.

One of those aspects include conservativeness and fragmentation by assigning parts of the project to employees who don’t fully understand the scope of the project (Aulich, 2011). This could lead to an objective led organisation where employees either don’t recognize or accept the long term goals of the company as their own. The other scenario is that employees are too focused on the short term objectives and have minimal time to grow their skills in the company’s desired path (Brady & Patching, 2015). This could give rise to a whole host of challenges in the QS profession (listed below) however QS leaders need to be aware of these challenges faced by their profession, in order to positively influence or grow their profession to greater potentials or heights.
2.5.1 Supplanting

This is the act of forcefully taking the place of another or strategizing ways in which to replace another. In quantity surveying firms there are many ways to implement this, professionals could be given early retrenchment letters and advised that the company is in financial trouble. Usman, (2012) states that the QS could also be given limited or no work, site visits to remote destinations on a daily basis away from family to such an extent that the QS feels it necessary to move to another company. These are several ways in which professionals could be indirectly forced out of a company in order to promote a favoured individuals with less experience or credentials.

QS leaders need to break down communication barriers and promote trust and understanding in the entire team. Favouring individuals due to personal interest creates animosity amongst the team which impacts negatively on a QS service offering (Brady & Patching, 2015).

2.5.2 Mismanagement of funds and resources

Zareen, Razzaq, & Mujtaba (2015), state that the QS could be viewed as the gateway for money into and out of the project and this power can be abused in various stages. Usman, (2012) states that often in the construction stage, the QS would evaluate the work completed on site however, the contractor could bribe the QS so that he/she certifies more work than what is actually completed on site. Overpaying the contractor creates a risk that the contractor could walk away from the project with more money than they should have.

This situation can be avoided by QS leaders being transformational from day one of their subordinates training and instilling good values that build character (Spisak et al., 2015).

2.5.3 Organizational unethical attitude

Pfajfar et al. (2016) states that professionals are tasked with being ethical and having the client’s best interests at heart while contractors are generally in business to make a profit. These opposing goals are one of the key reasons why the both may clash and either party may be unethical.
Good QS leaders whom have a lot of experience would have the necessary skills to balance both the client’s and contractor’s needs. QS leaders need to understand what complementary strengths are possessed by the team and use this knowledge to encourage discourse surrounding issues that face the team and client. Further to that, QS leaders can negotiate and compromise while respecting architects and engineers designs, so that all parties are satisfied (Baxter, 2015).

2.5.4 Bureaucracy
QS leaders who don’t follow government policies concerning distribution of work amongst graded contractors, are forced to do additional work to rectify their initial non-cooperation. This increases time spent, contractor’s costs and the resultant effect is a reduced available budget to spend on other departments (Fiaz et al., 2017).

2.5.5 Individuals unethical behaviour
Usman (2012), states that despite tender adjudication reports and an urge for quantity surveyors to be ethical, contractors wanting the work could offer a bribe for the award of the tender. This is not only detrimental to the project but undermines the quantity surveying profession as a whole.

The SACQSP is a governing body for QS professionals and has rules and regulations in place that is meant to be adhered to. If for instance the rules are broken, the QS leaders need to issue warning letters, penalties or report instances of criminal activity to prevent continuation and set an example.

2.5.6 Software applications
Incorrect, outdated use of software or compatibility issues when working amidst a team hampers the progress of the project. Communication by leaders about the abilities of the software and the need for different aspects in the different stages of the project life cycle is vital to the success of the project (Brady & Patching, 2015), (Yıldız & Şimşek, 2016).

Weber (2014) describes the variance in budgets with a range between 25 to 50%, which has led to more focus being placed on reducing this percentage. Despite the
need to reduce this percentage, Agyekum (2015), states that quantity surveyor leaders are slow to adopt advanced software programs that will not only reduce this percentage, but boost quantity surveyors morale with reduced hours spent on the project in an attempt to meet impossible deadlines.

According to Brady & Patching (2015), management of quantity surveying companies often feel that they don’t require additional software and that current software would suffice to deal with clients requirements. The fact that technology is advancing is almost completely ignored in certain practices. There are several reasons for the lack of support regarding advanced software. Examples of these concerns are that software would replace jobs, risk of virus attacks, high outlay cost of the hardware or software, and employees abusing the software for private work and not company business (Aulich, 2011), (Usman, 2012).

2.5.7 Traditional method remained
Yıldız & Şimşek (2016), believe that professionals are rooted in their ways and leaders of the older generation are resistant to change as they believe that change would deviate too much from the traditional system that they know and understand. They also feel that they would lose their insight over the management due to complex IT software applications and therefore they would not move forward and innovate.

2.5.8 Lack of use of Information and Communication Technology (ICT)
According to Usman (2012), ICT comes with a whole host of benefits however QSs are lacking in the approach to adopt these systems as part of their day-to-day business. Clients are seeking quantity surveying companies that will keep their projects within budget and have access to the latest technology and strategies in order to ensure that projects are completed within time and contract amount.

The quantity surveying practice has historically used Microsoft packages such as Word and Excel since the early 80’s, however current leaders are slow in adopting advanced software such as WinQS, Building Information Modelling (BIM) and DimensionX due to their perception of the cost versus reward, time implementation
and the corruption that is involved in the construction industry in South Africa (Brady & Patching, 2015).

Despite the success of using the latest technology in some firms, leaders in competitor companies maintain a negative attitude towards this proof of sustainable cost management and service delivery.

Although leadership is an important factor for organisational success, most organisations and boards have failed to take into account the leadership approach of the QS and how their approach affects the QS subordinates, various disciplines and the organisation (Spisak et al., 2015). There is a need to explore leadership, its various approaches and their suitability to the QS profession at the current junk status of the economy.

2.6 Leadership defined

Leadership is found in humans, animals, organisations and society. It is needed in order to achieve common objectives. According to Kostovski, Bojadjiev and Buldioska (2015), leadership means “communication, motivation, encouragement and involvement of the people. Leadership is a vision, idea and direction and requires ability to motivate people to complete their tasks without being closely supervised.”

“Leadership means moving beyond the practice of management; it is not, as some people would like to believe, something mysterious and limited only to those precious few born with a golden spoon in their mouths.” Hough et al. (2007, p.285).

The evolution of leadership is shown below in Figure 2.3 which moves from era one where there are theories governing the traits of leadership, to the second era which focused on behaviour and contingency theories (Pfajfar et al., 2016). The third era outlined that organisations work with teams who come from different backgrounds and possess various attributes and it is essential for the leaders to be able to cope with diversity (Moonjoo, 2017), (Warner, 2017).
The fourth era explored the various types of leadership: transformational, transactional, laissez-faire and coercive. Moonjoo (2017) further stated that unless the leader is able to change his leadership approach to market situations, it is unlikely that the leader nor organisation would succeed.

2.7 Components of leadership

Hough et al. (2007) believes that in order for businesses to be successful, it needs leaders with the ability to lead in multiple levels. Leadership in this sense can then be defined into four levels as shown below:

- Personal level

This level deals with the leader’s trustworthiness which is dependent on both the competence and character of the leader. Yıldız & Şimşek (2016) believes that trust is earned in the social environment and is solely based on the personality of the leader. McCaslin (2015) states that if there is mistrust in the team, the team and ultimately the
organisation will fail. He further states that trust builds relationships and helps subordinates flourish.

- **Interpersonal level**

  Leadership is governed by three sub-levels namely:
  
  **Build mutual trust and cooperation** – Yıldız & Şimşek (2016) describes this as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control the activity.”

  **Interpret the meaning of events** – Interpreting results that determine market flow and expectations is difficult without having the necessary skills. The existing systems in place would fail and could cause conflict between the leader and subordinates when margins aren’t met (Skogstad et al., 2014).

  **Obtain necessary resources and support** – According to Paulienė, (2017) having key resources is crucial to organisational success in a competitive environment. McCaslin (2015) states that support in leadership is necessary to the wellbeing of the entire team. Support is garnered from subordinates and harnesses innovative behaviour from the leader.

- **Managerial level**

  There are various factors at management level namely:

  **Develop and empower people** – Khan & Ismail (2017) state that a team needs empowerment and support to improve cognitive results in companies. Development of subordinates further improves their inventiveness and advancement.

  **Build task commitment and optimism** – Achieving organisational tasks and goals boosts self-esteem of subordinates who are further committed to perform. Leaders can then spend less time focusing on achievement of team goals and more time on ensuring team satisfaction (Fiaz et al., 2017).
Organize and coordinate activities – Khan & Ismail (2017) states that leaders need to find harmony when organizing tasks between subordinates. This harmony would gain insight into learning from past mistakes and having a smooth transition into the future.

• Organizational level

Choi (2017) states that the leadership approach is vital for an efficient team and organizational growth. The various abilities that are required to be demonstrated by the leader at this level:

Create alignment of objectives and strategies – Khan & Ismail (2017) states that learning to align the objectives with QS subordinates creates a winning strategy.

Strengthen collective identity – Brahim, Ridić, & Jukić (2015) believes this can viewed as creating a ‘culture’ and the leader needs to develop his identity and culture among subordinates, in order to increase organizational performance. Warner (2017) believes that QS leaders need to have an inclusive culture and there is definitely room for improvement.

Encourage and facilitate collective learning – Collective learning should be encouraged for development of QS subordinate capabilities (Zareen, Razzaq, & Mujtaba, 2015).

Promote social justice and morality – Leaders need to be sensitive and encourage QS subordinates to be moral (Brahim, Ridić, & Jukić, 2015).
According to Shah (2016), job requirements don’t remain static as depicted above in Figure 2.4. The organisation may have targets that are set at the start of the year, but these change and it is important keep up. In order for QS leaders to stay ahead, they need to grow and if need be, change their leadership approach. Tabassi et al. (2017) concurs with this and states that QS leaders need to take on more challenges and responsibilities.

**2.8 Situational leadership model**

The situational leadership model can be depicted by Figure 2.5:
The four leadership styles can therefore be defined as:

- **Telling** – this is a low relationship/high task behaviour whereby the subordinate is given a task with little guidance;
- **Selling** – this is a high relationship/high task behaviour whereby the subordinate is given many tasks with a lot of guidance;
- **Participating** – this is high relationship/low task behaviour whereby the subordinate is given a task with a lot of guidance;
- **Delegating** – this is low relationship/high task behaviour whereby the subordinate is given a task with no guidance.

### 2.9 Becoming a more effective leader

What’s required:

- **Task-oriented** – QS leaders need to commit and deliver on client deadlines.
- **Relationship-oriented** – The team should not work in silos but as a functional unit.
- **Change-oriented** – QS leaders need to lead by example and encourage subordinates to reduce operating costs by being innovative (Aulich, 2011).

### 2.10 Change leadership

There are four phases that leaders should consider when deciding on adopting a new strategy moving forward.

- **Phase 1 – Denial and disbelief**
  
  At this stage the subordinates may take on a negative approach and question the change which is inevitable. They may further question the strategy and the need for one that changes from the norm. The quantity surveying industry is continuously changing according to Agyekum, Ayarkwa, & Acheampong (2015) technology is improving in line with that change. Software that worked well in the early 2000’s may not necessarily work well today and may be completely redundant by 2020. There is a need to keep up with times and quantity surveying leaders inability to adopt the latest
software due to management objectives or restrictions, limits the abilities of the quantity surveyor, and thereby the growth of the professional field.

- Phase 2 – Fear and anxiety
  At this phase subordinates have accepted that change is going to take place despite their criticism however they begin to feel a sense of panic and question if they will cope. Fear is a result of possible miscommunication and misunderstanding so leaders need to adequately prepare and make the subordinates comfortable to the parameters of change that is coming (Aulich, 2011).

- Phase 3 – Adjustment and reluctant acceptance
  There is acknowledgement that there will be a sense of trepidation at the start however at this phase subordinates have reluctantly accepted the change and have slowly started to adjust. This phase is focused on interpersonal relationships and subordinates accepting that there needs to be behavioural change in terms of roles and responsibilities (Brahim, Ridić, & Jukić, 2015).

- Phase 4 – Commitment and integration
  At this phase subordinates are now fully integrated into the change and are committed to the objective of the organisation. They are engaged and motivated to attain predetermined targets. There should be no doubts at this stage instead there should be a heightened awareness regarding the path that has been laid (Aulich, 2011).

2.11 Types of leadership

Leadership in the quantity surveying practice has moved away from quality to quantity. An investigation of the key leadership skills that are needed in order to overcome this label and move forward is required (Cerni, Curtis & Colmar, 2014).

There are various types of leadership however for the purposes of this research, the three main approaches to leadership that will be addressed and compared are transactional, laissez-faire and transformational leadership. These will be discussed with emphasis placed on laissez-faire and transformational leadership.
2.11.1 Transactional leadership

Transactional leadership is based on a reward for either achievement, or punishment for non-achievement of a goal. This relationship tends to influence the subordinates' behaviour according to the leader’s goal (Cerni, Curtis & Colmar, 2014).

According to Zareen, Razzaq, & Mujtaba (2015) transactional leadership is focused on leader-subordinate relationships where the leader will reward a subordinate if an instruction is followed. There is a reward system for this type of leadership:

1. Positive – the reward can be monetary or in the form of appreciation for meeting objectives or following an instruction.
2. Negative – if the subordinate fails to meet an objective or instruction, the leader can discipline the subordinate.

Leaders who adopt a transactional approach generally issue instructions regarding the task and then monitor the subordinates. The reward could be based on the satisfaction level of the leader.

Transactional leaders direct subordinates’ behaviors by means of reward which help subordinates feel part of the organization. This reward system motivates subordinates to perform in order to achieve the reward (Brahim, Ridić, & Jukić, 2015).

Figure 2.6: The 9-box rating system used to evaluate performance
A typical example of a transactional approach to leadership would be a leader who adopts the 9-box rating system as shown above in Figure 2.6. Subordinates are rated on a system where 1 is the highest possible score and 9 the lowest and subsequently their yearly increase is based on this rating. There are several issues that arise when adopting this method of subordinate performance. Firstly, the budget that’s allocated to each department for yearly increases is dependent on organizational performance. This rating can then be lowered and increased depending on the budget which might conflict with the above system and could possibly result in subordinates losing faith in the performance and reward system.

According to Saravo, Netzel, & Kiesewetter (2017), another issue that arises is that most transactional leaders who employ this model to reward subordinates have to align their rating with a Bellmouth curve as depicted below in Figure 2.7. This curve then increases or decreases a subordinate’s rating to fit within the curve. The issue that arises when utilizing this curve is that if an organization had 50 employees and all were top performers rated at 1 or 2, then 70% of them would be rated around 5, 10% would be rated around 9 and only 20% would be rated around 1 or 2.

This would be an inaccurate reward system which would not truly do justice to the transactional approach ethos.
Figure 2.7: The Bellmouth Curve used to distribute the employee increase


2.11.2 Laissez-faire leadership

According to Zareen, Razzaq, & Mujtaba (2015) laissez-faire leadership is a type of leadership approach whereby the leader grants power to the subordinates in terms of decision making. It is also a leadership approach where the subordinates are unsupervised and are not given any direction or feedback in terms of decisions. This type of leadership is risky in the sense that subordinates left to themselves will have to make decisions on their own that impact the organization and can be seen as a major learning curve for the subordinates. This leaves greater room for failure.

This type of leadership is however beneficial when subordinates are highly motivated and capable of performing tasks with little or no direction. Zareen, Razzaq, & Mujtaba (2015) further states that this leadership approach is successful when decision making for subordinates is simple and requires minimal thought. When there is considerable need for direction with regards to decision making then laissez-faire leadership approach would ultimately fail.
Employees of recent, are more in-touch with their abilities and their need to progress within the organization. They enjoy the freedom and trust to make decisions which have a positive impact on their performance. Where transactional leadership approach portrays financial gain or fringe benefits as a reward mechanism, laissez-faire portrays a leadership approach that promotes the subordinates ability to be involved in organizational decisions and gain self-satisfaction from being a part of this process, a vital piece of the company (Zareen, Razzaq, & Mujtaba, 2015).

Leaders in the quantity surveying field have dedicated themselves to meeting client and tender deadlines and have neglected the human component of the employees which has resulted in a lack of professionalism in the industry. Agyekum, Ayarkwa & Acheampong (2015), states that there are often shortages of skills and competencies in the quantity surveying profession and that there is a need to address these skills and increase the human potential in this profession.

2.11.3 Transformational leadership
In the 1980’s a new form of leadership emerged, transformational leadership which captured the interest of a large group of academics. This type of leadership is whereby subordinates are influenced to such an extent that they can change the foundation of social systems in organizations to develop the organization (Van Beveren et al., 2017).

Van Beveren et al. (2017) further stated that transformational leadership is characterized by the following traits in leaders:
1. Communicate a vision
2. Develop staff
3. Provide support
4. Empower staff
5. Innovation
6. Lead by example
7. Charismatic

According to Zareen, Razzaq, & Mujtaba (2015) transformational leaders create awareness of issues that face the organization. The effect of heightened awareness inspires employees to go the extra mile to achieve predetermined objectives. These leaders often inspire subordinates to such an extent that they align their beliefs to that of the leader. Further to
that, transformational leadership can be characterized by four “I’s” in Figure 2.8 below and as such is defined by, idealized influence (II), inspirational motivation (IM), intellectual stimulation (IS) and individualized consideration (IC) (Alatawi, 2017).

II is generally when leaders influence the behavior of subordinates by being a role model to them. The leader’s behavior garners respect from their subordinates by association with the leader (Choi, 2017), (Zareen, Razzaq, & Mujtaba, 2015).

IM is when leaders promote trust amongst subordinates who are then motivated by the leader to go beyond expectations. The subordinates are motivated by self-enrichment and a shared vision of the organization (Choi, 2017), (Zareen, Razzaq, & Mujtaba, 2015).

IS whereby subordinates are encouraged to be innovative when devising solutions to organizational issues. Subordinates are encouraged to perform to the edge of their potential and in doing so, will be creative (McCaslin, 2015). IC is a result of leaders who support their subordinates and mentor them to the best of their ability. IC goes a long way in developing a subordinate’s confidence in the organization.

Figure 2.8: Transformational Leadership

Alatawi (2017) further points out that although the theoretical characteristics for transformational leadership is partially based on the four I’s, these characteristics can also be found in transactional and laissez-faire leadership approaches.

According to Alatawi (2017), transformational leadership is a leadership approach whereby the leader identifies problems in the organization and provides insight or a vision of overcoming the problems and achieving organizational success. One of the issues that QSs face is the lack of professionalism and there is a need for Continuing Professional Development after the QS has attained ‘professional’ status (Warner, 2016).

Transformational leadership tends to move away from transactional leadership in that instead of rewards, there is active engagement with subordinates to develop their full potential. As employee’s level of satisfaction grows in the organization, so does their commitment to the organization (Zareen, Razzaq, & Mujtaba, 2015). Alatawi (2017) contradicts this view and states that although transformational leadership develops potential, transactional leadership achieves objectives.

The founding theory behind transformational leadership is that leaders inspire subordinates to achieve more than they believed was possible.

2.12 Transformational leadership and team effectiveness

Leader’s behavior is instrumental to overall team effectiveness and in transformational leadership it is vital that the leader who holds the authority makes the right decisions. This type of leadership is termed vertical leadership where the leader holds all responsibilities and bears the risk for wrong decisions and actors (Suk Bong, Kihwan, & Seung-Wan, 2017). Good leaders tend to know how to manage conflicts whilst effectively balancing alternative views that build a team (Spinelli & Adams, 2016).

This type of leadership attempts to understand the personal interests of subordinates and promotes changes in the form of promotions or stability in their career, which all has a positive effect on the organizational performance.
2.13 Leadership and trust

Trust is important within organizations and subordinates tend to follow the leader they trust. Open communication, cooperation and a gentle manner are key factors in building trust between the leader and subordinates.

The concept behind being a transformational leader is a leader who has vision and articulates this vision down to the organization. The team then streamlines the process of change (Hough et al., 2007). Suk Bong, Kihwan, & Seung-Wan (2017), describes transformational leadership as an approach that promotes innovation but contradicts Hough et al. (2007) and states that shared leadership whereby the leadership role is shared among subordinates, promotes organizational performance.

The era of bullying and dictating has passed and leaders need to be competent in selecting their team as well as taking responsibility for the position in which they have been appointed (Hough et al., 2007).

Botelho et al. (2017) states that staff turnover is a major problem for professional service providers like quantity surveying companies. Usually key clients tend to follow the employees who leave, mainly because a relationship has formed with the employee and client that has spanned several years. The results of the Botelho et al. (2017) study also showed that clients are less likely to follow employees if the client is served by an entire team, however the quantity surveying services almost always has one employee as the liaison with the client whilst the rest of the team are directed on achieving the deliverables.

Botelho et al. (2017) further expands and identifies four behaviours that set successful leaders apart from managers namely:

- Deciding with speed and conviction

  According to a study that was undertaken decisiveness acts greatly in favour of the leader and acting quick rather than struggling to make decisions is viewed in a better light. In fact the study also showed that leaders with high IQ’s sometimes failed to act decisively and may cause a bottleneck and be detrimental to the company as a whole. The study further pointed out that a total of 94% of Botelho et al. (2017) respondents performed low based on their slow reaction or time taken to make pivotal decisions.
Successful leaders know when to act and know that making any decision is better than making no decision at all. Another factor that makes subordinates lose faith in their leaders is when a leader questions his decision or tries to revise his decision. Employees favour confident and sure leaders who can guide with little or no doubt.

- Engaging for impact

It is important for leaders to get support from their subordinates once a decision has been taken. This is important as it helps the leaders keep focus and the subordinates engaged to help deliver the predetermined goals. Understanding the employees and customers needs is paramount to achieving success in business. There needs to be a stakeholder map when moving forward with the key stakeholders highlighted. There needs to be a clear path whereby concerns are answered by QoSs and channelled into the business strengths (Botelho et al., 2017).

A plan needs to be delivered with conviction and any doubt removed from the employees minds. Communication needs to be clear and direct from the leader and hesitation or stray words would deter the employees from the focus of the message. Good leaders succeed by gaining and harnessing the support of their subordinates while building confidence in their leadership abilities and conflict management.

- Adapting proactively

In order to examine how important it is to proactively adapt, the recent Brexit and the aftermath of the recent US election needs to be considered. These situations were not a possibility prior to them happening and businesses and leaders alike had to adjust in order to survive and be successful. Successful leaders spend more than 50% of their time thinking about the long term. Long term vision helps leaders identify early signals and activate early planning or implementation to set up a working strategy. Successful leaders employ diverse methods that range from browsing all social media and information flows to finding data which may at first seem irrelevant, but is in fact pivotal to the success of the company Botelho et al. (2017).
Successful leaders are those that can also acknowledge that setbacks are an integral part of growing as a company and lessons learnt. QS leaders who found ways to overcome their mistakes by revising a plan were often more successful than leaders who were stubborn in their belief that they had made a mistake. Unsuccessful leaders do not consider the likelihood event of mistakes happening again, nor ways to deal with it should the situation arise in the future (Weber, 2014).

- Delivering reliably

According to Botelho et al. (2017) the ability to be predictable and deliver on promises is common behaviour to QS leaders who were more than likely to be picked to lead on consecutive years. It’s also important for leaders once appointed, to not jump straight into executing plans but to rather engage with board members as well as subordinates to understand where they are going and what they need to do to get there before finalising and implementing a strategy.

There are other tactics that successful QS leaders employ such as good planning and organizational skills. Dashboards, systems of accountability and course corrections that rivals counterparts are all important for the success of QS leaders in the future (Suk Bong, Kihwan, & Seung-Wan, 2017).

2.14 Chapter Summary

This chapter presented the various construction stages and highlighted the QS role in each stage. The issues concerning the QS profession were raised which showed the need to address these issues whilst adopting a correct leadership approach. Chapter 3 presents the research methodology chosen to determine the correct leadership approach within the QS profession.
CHAPTER 3
Research Methodology

3.1 Introduction
The researcher identified a problem or a research question as a result of a gap in the available literature or a green field area of research. The researcher then requested the research to be cleared by the ethics committee so that the research does not infringe any laws or regulations concerning people or organizations. Following subsequent approval, the researcher then obtained relevant research data which was then validated (Bhaskar, & Manjuladevi, 2016). This research study is quantitative in nature and has been conducted to determine which leadership approach between transformational and laissez-faire is better suited for the quantity surveying profession.

3.2 Research Design
The research design is used to determine the outcome of the research based on the research parameters. Research designs aids methodological clarity according to Wiesche et al. (2017) and also contribute to the development of the research context and contributions.

Nunumaker et al. (2017) states that before data is gathered, analysed and discussed it is necessary to establish a research design. The research design attempts to identify what type of research should be undertaken in order to address the research problem. Creswell (2009) states that the research design attempts to understand the nature of the problem, the participants and the researcher’s assumptions.

Having a good design and research parameters allows for a more precise conclusion and helps avoid research becoming too vague. This research paper followed a quantitative design in order to meet the listed objectives and determine the more suited leadership approach. Since QSs from the industry are being approached, this research process was used so professionals could participate at a time convenient to them.
3.3 Research Approaches

3.3.1 Qualitative Research

Qualitative research is subjective in nature and attempts to study participants in their environment. Wiesche et al. (2017: 686) describes qualitative research as it “allows the researcher to develop a theoretical account of the general features of a topic while simultaneously grounding the account in empirical observations of data.” Bhaskar, & Manjuladevi (2016) states that qualitative research attempts to answer the ‘how’ and ‘why’ whereas quantitative addresses the ‘where’, ‘what’, ‘who’ and ‘when’ questions.

There are various methods to carry out data collection for the quantitative approach but the most common include:

- Interviews
  This type of data collection allows face-to-face contact with participants which is beneficial in that it allows the researcher the ability to provide clarity over questions that may be unclear. The questions for the interview can either be unstructured or semi-structured however, providing the opportunity (intentional or not) for the researcher to influence the respondent when explaining questions. Respondents may feel pressured to agree with the researcher’s opinion and this may skew the results of the interview (Bhaskar, & Manjuladevi, 2016).

- Observation
  This method allows the researcher to understand the situation by observing phenomena directly. This type of research can either be participant or non-participant. Participant observation is whereby the researcher would form part of the experiment and non-participant would be when the researcher is merely an external observer (Bhaskar, & Manjuladevi, 2016).

- Documents
  This method of data collection is relatively cheap and can be obtained from databases, local records and libraries. The disadvantage of this type of data collection is that there may be lack of authenticity and the records may be difficult to validate. Further to that, information might be outdated and irrelevant over time (Bhaskar, & Manjuladevi, 2016).
The qualitative method was not used for this research paper as this paper attempted to determine the better suited leadership approach across the various stages of the project, which can be quantified.

### 3.3.2 Quantitative Research

Quantitative research can be used to explain social phenomenon and uses deductive logic based on the nature of the data. An experimental study was used for the purpose of this research being better suited to establish the best leadership approach as it was explored thoroughly first hand, and the quantitative approach can then be expressed numerically (Garg, 2016).

According to Bhaskar, & Manjuladevi (2016) prior to the development of questionnaires the first step would be to develop a research tool and the following represents the process followed:

1. Concept development – the researcher needs to determine the foundation that the research is based on.
2. Specification of concept dimensions – the researcher needs to identify the gap in the literature in order to formulate a research dimension.
3. Selection of indicators – after the formulation of the concept and identification of research gaps, the indicators in the research are measured. Indicators are defined as the opinion or expectation of the research subject and numerous indicators improves the validity of the research.
4. Formation of index – the indicators including measures are then grouped into clusters to form an overall index of the research.

- **Questionnaires**

A questionnaire consists of a number of questions printed or typed in a particular order on a single or set of forms. This is a cheap method of obtaining data without the cost of employing staff to aid in collection of data. It is assumed that when people are assured of anonymous responses, they tend to be more truthful in their responses. The questions are written on the survey questionnaire and require a response from the participants. It is important for the questionnaires to be assessed for validity (Bhaskar, & Manjuladevi, 2016).
Questionnaires were used for primary data collection and distributed amongst the quantity surveying professionals in KwaZulu-Natal through the SACQSP. They were confirmed anonymous, distributed and collected electronically.

3.4 Sources of Data

3.4.1 Primary Data

There needs to be clear objectives in order for them to be measured. Primary data is generally data that is collected for the first time and forms the basis for the research. This data generally forms the most reliable data related to achieving the objectives (Garg, 2016).

3.4.2 Secondary Data

Secondary data is generally data that was compiled by alternate researchers that have already been validated through statistical processes. This data normally has an indirect link to primary data (Bhaskar, & Manjuladevi, 2016).

3.5 Sampling

Sampling can be described as the process of selecting an individual from a large population, and the outcome drawn from the sample is generalised to the entire population. The researcher first needs to identity the target population and then consider whether it is possible to study all the individuals in that population. Usually this is not possible and a sample population is then identified. The most important factor is that all individuals should have an equal chance of being selected for the study and there should not be any bias in terms of selection (Garg, 2016).

3.5.1 Types of sampling techniques

Randomisation

This is a form of allocation of population into a group for the study. In order to statistically analyse data, this would be a simple assumption. Randomisation reduces statistical bias and intends to increase statistical power (Garg, 2016).
**Probability sampling/randomisation**

- **Simple unrestricted** – this method is normally used when the sample population is small.
- **Stratified** – this method is used by dividing the sample population into groups called stratum and the stratum is randomly selected.
- **Systematic** – this is used when the entire sample frame is available and includes unit selection by a structured pattern.
- **Cluster** – this is normally used for a large population that covers a large geographical area. The population is divided into clusters where the samples are then drawn from.
- **Multistage** – this is used for nationwide research where sampling is done in stages. Sub-sampling also takes place within the sample.

**Non-probability sampling/randomisation**

Unlike probability sampling, this type of sampling does not guarantee that each person would get an equal chance of being selected for the sample. The various types are as follows:

- **Convenience** – this type of sampling is done relevant to what is convenient to the researcher.
- **Purposive** – this type of sampling is done as per the researcher’s judgment.
- **Quota** – this type of sampling is based on the researchers specific needs from the study population which may be age or sex.

**3.5.2 Sample frame**

A sample frame is drawn from the available population and has an equal chance of being selected.

The quantity surveying sector in KwaZulu-Natal, the local geography was selected as a basis for sampling for a more definitive result. The target population was quantity surveying professionals in the KwaZulu-Natal built environment, who are registered with the South African Council for the Quantity Surveying Profession.

The sampling technique that was used was convenience sampling with restrictions being placed on professional quantity surveyors registered with the SACQSP council and having
a minimum of 3 years work experience in the built environment. Respondents who are estimators and employed by contracting entities was excluded from the sample population.

3.5.3 Sample Size

The size of the sample is governed by the number of people who are representative of the research population.

According to the SACQSP council, there are 2150 registered professional quantity surveyors in the country. There are roughly (due to migration) 300 professionals based in KwaZulu-Natal and so the survey was emailed to these professionals.

3.5.4 Sample selection bias

Bias in research samples is reflected by the incorrect use of samples that is not the true reflection of the population, which could lead to inaccurate results. The survey was distributed to the entire target population to avoid any bias in the results.

Table 3.1: Sampling design and procedures

<table>
<thead>
<tr>
<th>Sampling design / procedure</th>
<th>Consultants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target population</td>
<td>300 SACQSP Registered professionals within KZN</td>
</tr>
<tr>
<td>Sampling method</td>
<td>Convenience sampling</td>
</tr>
<tr>
<td>Sample size</td>
<td>300 registered professionals</td>
</tr>
<tr>
<td>Conduct fieldwork</td>
<td>Survey distribution (electronically)</td>
</tr>
</tbody>
</table>

3.6 Validity and Reliability

According to Bhaskar, & Manjuladevi (2016), external validity is to generalise the study to other similar groups whereas internal validity are errors that could result from the variables under examination.

Validity can be tested by the following ways:

- Content validity – the ability to cover all aspects of the research.
- Construct validity – the ability of the research to conform to theoretical concepts.
- Criterion validity – the ability of the research findings to correlate with existing findings.
Survey content validity was scrutinised through developing the survey from the literature review and conducting a pilot study by distributing the questionnaire to sample registered QS respondents to check for clarity and content. This eliminated any ambiguities in the survey and improved the overall quality.

### 3.7 Instrument Administration

A survey was drafted and then issued to registered professionals through SACQSP. The survey was structured so that the answers were definitive. The reason behind choosing a survey was due to the ease of analysing the results within the time frame.

All of the questions that were issued to participants were consistent and documented the questions in the same sequence. The intention of the sequence of questions were to place the simple questions at the beginning to ease the participants into the process and gradually progress to the questions that required some thought.

The first section of the survey (questions 1 – 3) were used to collect demographic data from the respondents and included questions regarding period worked in the industry, the type of organisation, and the province to rule out any respondents who do not meet the criteria.

Questions 4 – 8 introduced the leadership component of laissez-faire and transformational leadership but also their opinion on using the correct leadership approach and how it affects their role in tasks and meeting project deliverables.

Questions 9 – 10 goes into detail and questions the performance of subordinate duties through the laissez-faire versus the transformational approach.

Question 11 is a cluster of questions which examines the respondents preferred method of leadership. Each question in this cluster represents an attribute specific to laissez-faire or transformational leadership.

The collected quantitative data was analysed using the Statistical Package for Social Sciences (SPSS) and Google Forms that has a built-in analytical tool.
3.8 Response Rate

The response rate can be considered as the percentage of people who respond to a survey. The higher the response rate, the more the survey results encompass the target population. The response rate has been linked to the validity of analysed data from surveys. An example would be that a research study could be considered unacceptable as valid research, if the response rates were fairly low (Bhaskar, & Manjuladevi, 2016).

3.9 Ethical Considerations

3.9.1 Confidentiality

The respondents were assured of confidentiality through the consent form that was issued with the survey. They were further assured that their responses were to be used for research purposes only.

3.9.2 Anonymity

Although the consent form collected information such as names and contact details, the analysis of the survey omitted any respondent details. Further to that, the analysis doesn’t link an individual response with any of the respondent identities.

3.9.3 Feedback

Respondents were granted opportunity to request feedback concerning the overall study, once completed. This is in line with the objective of improving the QS profession by identifying the better suited leadership approach for the profession.

3.10 Limitations

The limitations of the research are as follows:

- Only QS professionals within the KwaZulu-Natal province were used in the sample;
- Only registered professionals who obtained their professional registrations with the South African Council for the Quantity Surveying Profession were used in the sample;

This research paper focuses on the transformational versus the laissez-faire approach in quantity surveying but acknowledges that there are other leadership approaches which are briefly described in this dissertation.
3.11 Chapter Summary

This chapter briefly explained and presented the research methodology undertaken for this research paper. The sources, sampling and instruments were clearly defined. Chapter 4 presents the analysis of these quantitative findings.
CHAPTER 4

Presentation of the results

4.1 Introduction

This chapter attempts to analyse the collected quantitative data using the Statistical Package for Social Sciences (SPSS) and Google Forms that has a built-in analytical tool. Descriptive analysis was used to explain the results and outcome of the survey data. The findings of the study are depicted in various formats including pie charts and tables for visual aid and ease of understanding.

4.2 Statistical Analysis

4.2.1 Descriptive statistical analysis

This type of data analysis is presented in a meaningful manner in either tabular or graphical form and measures the mean, median and mode of central tendency. Descriptive analysis generally forms part of the quantitative study.

4.2.2 Inferential statistical analysis

Inferential statistical analysis makes a judgement of the entire population based on the data collected and analysed from the sample group. This type of analysis can be referred to as inferring a judgement or outcome based on an observation of the sample.

4.3 Response rate

The South African Council for the Quantity Surveying Profession (SACQSP) issued the survey through email to the professional QSs in KwaZulu-Natal and data was subsequently collected over a month to form the basis of the study. The sample size was 300 with 194 responses which reflects a response rate of 64.7% and was deemed acceptable to proceed with the study.

To improve the response rate the managers of QS companies were emailed directly to facilitate participation in the study.
4.4 Survey

The survey was compiled to get an unbiased view of the professional QSs in the industry (refer to Appendix A and B). Identification of a uniformed approach of how QSs prefer to be led was the starting point. This was followed by the performance of the laissez-faire and transformational approach against the various project stages. Adoption of the better ranked leadership approach by lead QSs is paramount for success.

4.4.1 QS profile

The QS profile consisted of SACQSP registered professionals. In order to become professionally registered with the council the QS requires a minimum of 3 years working experience. Logbooks are required from a QS to document their experience with the various stages in a project cycle. QSs are further examined on their leadership ability and how they overcame issues on project stages which is explained in Chapter 2. A QS needs to have the approximate percentages of documented time spent attaining those skills outlined below in Table 4.1 (A detailed breakdown is provided in Appendix E):

Table 4.1: Areas of Workplace Skill / Experience

<table>
<thead>
<tr>
<th>Areas of Workplace Skill / Experience</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0 Inception</td>
<td>5%</td>
</tr>
<tr>
<td>2.0 Concept and Feasibility</td>
<td>10%</td>
</tr>
<tr>
<td>3.0 Design Development</td>
<td>15%</td>
</tr>
<tr>
<td>4.0 Documentation and Procurement</td>
<td>20%</td>
</tr>
<tr>
<td>5.0 Construction</td>
<td>35%</td>
</tr>
<tr>
<td>6.0 Close-Out</td>
<td>10%</td>
</tr>
<tr>
<td>7.0 Specialisation</td>
<td>5%</td>
</tr>
</tbody>
</table>

Source: Adapted from SACQSP, 2017 http://www.sacqsp.org.za/?page=ROUTES

The QS council would review the logbooks and reports. Upon approval of these documents, the QS is interviewed for professional registration title. Once the QS passes, he/she moves from candidate to professional status and could then lead a QS practice or be a leader in a multidisciplinary consulting/contracting organisation.

The survey first questioned the number of years that the QS has been working in the industry in order to gain insight on the levels of experience that are present within KwaZulu-Natal. The results are shown in a pie chart below:
This pie chart demonstrates the vast range of experience in the current QS profession. This is a good platform for the survey as the respondents will have a holistic understanding of the leadership approaches and how it impacts project success.

The results show that 37.5% of respondents are within the first 5 years of working in the professional environment. These respondents are in the foundation levels of their career path therefore are easily able to adapt to new leadership approaches.

34.4% of professionals are within the 5-10 years’ experience bracket; these professionals would have been led by various QS leads and have developed their preferred sense of leadership. 9.4% was indicated for 10-15 years’ experience while 12.5% was indicated for between 15-20 years. These two brackets are generally the lead QS professionals who know which leadership approach suits them however they may also be set in their ways and antagonist to a change in the leadership approach.

4.4.2 Province

The surveys were distributed to individuals in the KwaZulu-Natal region however 3.1% of the respondents were from Gauteng (due to migration). These respondents were excluded from the sample size as the limitations placed on the study was within the KwaZulu-Natal region only. The study can however be applied to other regions in future to get a holistic view on the preferred method of leadership approach for South Africa.
Figure 4.3: Respondents (Gauteng was excluded from sample)

4.4.3 Organisations current leadership approach

The definition of laissez-faire and transformational leadership approach was defined by Zareen, Razzaq, & Mujtaba (2015) at the start of this survey. Figure 4.3 depicts that 72% of the respondents stated that a laissez-faire approach was used while 26% stated that a transformational approach was used. 2% of the respondents stated that both approaches were used in their organisation. These results clearly depict that a laissez-faire leadership approach was adopted by the majority of QS companies in KwaZulu-Natal.

This confirms the assumption that professional QSs are led mainly on the laissez-faire approach, which ties back to the recent lack of performance of QSs discussed in Chapter 1.

Figure 4.4: Organisations current leadership approach
4.4.4 QSs preferred method of being led

When respondents were questioned regarding their preferred method of being led, 67.3% preferred the transformational approach while 32.7% preferred the laissez-faire approach. This indicates that majority prefer the transformational leadership over the laissez-faire leadership approach.

Figure 4.5: QSs preferred method of being led

4.4.5 Leadership approach dependency

When questioned about whether or not their organisation was dependent on its leadership approach, 69.4% stated yes, 16.3% stated no and 14.3% were unsure. This indicates that the majority of professional QSs believe that the leadership approach of organisations is crucial to overall success.

Figure 4.6: Leadership approach dependency
4.4.6 Positive effect of using the correct leadership approach

Table 4.7 Data Interpretation Range

<table>
<thead>
<tr>
<th>Range</th>
<th>Frequency Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.21 – 5.00</td>
<td>To a very large extent</td>
</tr>
<tr>
<td>3.41 – 4.20</td>
<td>To a large extent</td>
</tr>
<tr>
<td>2.61 – 3.40</td>
<td>To some extent</td>
</tr>
<tr>
<td>1.81 – 2.60</td>
<td>To a little extent</td>
</tr>
<tr>
<td>1.00 – 1.80</td>
<td>Not at all</td>
</tr>
</tbody>
</table>


The 5 Point Likert scale was used and is calculated as \((5 - 1) / 5 = 0.8\) where each range is an increment of 0.80. These ranges were used in the analysis of the responses. Professional QSs were required to answer questions based on this system and a value was assigned according to Table 4.7. An “Unsure” response was assigned a 0 value and not taken into account.

QSs were asked to state their opinion on using the correct leadership approach across the various objectives below:

Table 4.8 Positive effect of using correct leadership approach

<table>
<thead>
<tr>
<th>Objective</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased efficiency</td>
<td>4.63</td>
<td>0.55</td>
<td>1</td>
</tr>
<tr>
<td>Meeting deliverable deadlines</td>
<td>4.44</td>
<td>1.01</td>
<td>2</td>
</tr>
<tr>
<td>Increased quality of documents</td>
<td>4.44</td>
<td>0.72</td>
<td>2</td>
</tr>
<tr>
<td>Cost planning accuracy</td>
<td>4.31</td>
<td>0.86</td>
<td>4</td>
</tr>
<tr>
<td>Co-ordination of design team drawings for measure</td>
<td>4.00</td>
<td>0.95</td>
<td>5</td>
</tr>
</tbody>
</table>

The mean showed a result of between 4-5 which is indicative that professional QSs believed that using the correct leadership approach increased efficiency, met deadlines, increased quality, accuracy and co-ordination. All of these factors are crucial to the organizational success. This finding correlated with Zareen, Razzaq & Mujtaba (2015)
research concerning organizational success and its link to accuracy, co-ordination and efficiency.

4.4.7 Negative effect of using the incorrect leadership approach

Table 4.9 Negative effect of using incorrect leadership approach

<table>
<thead>
<tr>
<th>Issue</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of understanding the project</td>
<td>4.19</td>
<td>0.82</td>
<td>1</td>
</tr>
<tr>
<td>Lack of professional standards</td>
<td>4.03</td>
<td>0.86</td>
<td>2</td>
</tr>
<tr>
<td>Exceeding original budget</td>
<td>3.97</td>
<td>1.03</td>
<td>3</td>
</tr>
<tr>
<td>Professional indemnity claims</td>
<td>3.88</td>
<td>1.04</td>
<td>4</td>
</tr>
<tr>
<td>Threat to services conventionally provided by quantity surveyors</td>
<td>3.56</td>
<td>1.32</td>
<td>5</td>
</tr>
<tr>
<td>Clash of responsibilities among professionals in the construction industry</td>
<td>3.56</td>
<td>1.27</td>
<td>5</td>
</tr>
<tr>
<td>Decrease in the demand for quantity surveyors required in the industry</td>
<td>3.22</td>
<td>1.54</td>
<td>6</td>
</tr>
</tbody>
</table>

Professional QSs were then asked to rate their opinion regarding using the incorrect leadership approach against the issues that face consulting companies highlighted in Table 4.9 above. These issues are prevalent in the QS industry and understanding their link to the leadership approach is necessary.

The score revealed a mean of 3.4-5 for the bulk of the issues in Table 4.9. This was indicative that QSs believed that using the incorrect approach would sustain the issues that are being faced by QSs in the built environment. This finding concurred with Usman, Said, & Yahaya, (2012) who believed that the incorrect leadership approach to QS companies has led to the current plight of the profession.

QSs felt that to some extent there may be a decrease in demand for QSs in the industry which means that it isn’t ruled out completely.
4.4.8 Performance of using a laissez-faire leadership approach

Table 4.10 Performance of using a laissez-faire leadership approach

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measuring work to date on site</td>
<td>3.31</td>
<td>0.97</td>
<td>1</td>
</tr>
<tr>
<td>Cost control</td>
<td>3.25</td>
<td>1.08</td>
<td>2</td>
</tr>
<tr>
<td>Preparing payment certificates</td>
<td>3.22</td>
<td>1.10</td>
<td>3</td>
</tr>
<tr>
<td>Preparation of final accounts</td>
<td>3.22</td>
<td>1.01</td>
<td>3</td>
</tr>
<tr>
<td>Preparing Bills of Quantities</td>
<td>3.19</td>
<td>0.93</td>
<td>5</td>
</tr>
<tr>
<td>Compilation and adjudication of tenders</td>
<td>3.16</td>
<td>1.22</td>
<td>6</td>
</tr>
<tr>
<td>Providing pre and post tender advice</td>
<td>2.67</td>
<td>1.12</td>
<td>7</td>
</tr>
<tr>
<td>Providing procurement advice</td>
<td>2.67</td>
<td>1.15</td>
<td>7</td>
</tr>
<tr>
<td>Value engineering</td>
<td>2.51</td>
<td>1.35</td>
<td>9</td>
</tr>
<tr>
<td>Providing estimates</td>
<td>2.39</td>
<td>1.08</td>
<td>10</td>
</tr>
<tr>
<td>Undertaking feasibility studies</td>
<td>2.19</td>
<td>1.27</td>
<td>11</td>
</tr>
<tr>
<td>Life cycle costing</td>
<td>2.16</td>
<td>1.21</td>
<td>12</td>
</tr>
</tbody>
</table>

Professional QSs were tasked with stating the performance of using the laissez-faire approach against the project deliverables in the various stages of construction in Table 4.10 above.

The laissez-faire approach to QS leadership scored a mean of 2-3 which reflected that the tasks were only able to be performed to some extent. Further to that, cost control which is the fundamental role of a QS responsibility to a client was ranked at number 2. This was in line with recent publication concerning the performance of QSs in the industry. The findings were further correlated with Sharma & Singh (2013) who stated that this was the leadership approach adopted for QS professionals who are highly skilled but hasn’t worked in favour for the profession for the last few years according to Akoto (2016).

Based on the results of Table 4.10 it is clear that the laissez-faire approach is not working for QSs in KwaZulu-Natal and the adoption of a new leadership approach is required in order to boost performance in each of each of the tasks listed in Table 4.10.
4.4.9 Performance of using a transformational leadership approach

Table 4.11 Performance of using a transformational leadership approach

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost control</td>
<td>3.88</td>
<td>1.00</td>
<td>1</td>
</tr>
<tr>
<td>Providing pre and post tender advice</td>
<td>3.81</td>
<td>1.06</td>
<td>2</td>
</tr>
<tr>
<td>Undertaking feasibility studies</td>
<td>3.78</td>
<td>1.31</td>
<td>3</td>
</tr>
<tr>
<td>Preparing Bills of Quantities</td>
<td>3.72</td>
<td>0.92</td>
<td>4</td>
</tr>
<tr>
<td>Providing estimates</td>
<td>3.69</td>
<td>1.12</td>
<td>5</td>
</tr>
<tr>
<td>Providing procurement advice</td>
<td>3.69</td>
<td>0.98</td>
<td>5</td>
</tr>
<tr>
<td>Preparation of final accounts</td>
<td>3.69</td>
<td>1.01</td>
<td>5</td>
</tr>
<tr>
<td>Compilation and adjudication of tenders</td>
<td>3.66</td>
<td>1.21</td>
<td>8</td>
</tr>
<tr>
<td>Preparing payment certificates</td>
<td>3.66</td>
<td>1.04</td>
<td>8</td>
</tr>
<tr>
<td>Value engineering</td>
<td>3.63</td>
<td>1.12</td>
<td>10</td>
</tr>
<tr>
<td>Life cycle costing</td>
<td>3.59</td>
<td>1.21</td>
<td>11</td>
</tr>
<tr>
<td>Measuring work to date on site</td>
<td>3.34</td>
<td>1.36</td>
<td>12</td>
</tr>
</tbody>
</table>

Professional QSs were tasked with stating the performance of using the transformational approach against the project deliverables in the various stages of construction in Table 4.11 above.

The transformational approach to QS leadership scored a mean of 3.4 which reflected that the tasks were able to be performed to a large extent. The tasks listed were the core responsibilities of the QS in each stage of construction and high performance against each task is required for the success of the profession. The performance of cost control was ranked at number 1 which is where the focus of the profession should be. The relationship between the tasks listed in Table 4.11 and the transformational weigh in favour of using this approach.

Based on the results of Table 4.11 it is clear that the transformational approach would be suitable for QSs in KwaZulu-Natal and concurs with Suk Bong, Kihwan & Seung-Wan (2017) belief regarding the strengths of this approach compared with the weaknesses of the laissez-faire leadership approach.
4.4.10 Preferential model

QSs were then asked for their preferred leadership approach by the characteristics of either laissez-faire or transformational leadership approach which is shown in the below Table 4.12.

Table 4.12 Preferential model

<table>
<thead>
<tr>
<th>Statement</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leader uses his/her power to help employees grow</td>
<td>4.44</td>
<td>0.72</td>
<td>1</td>
</tr>
<tr>
<td>Employees want to be part of the decision making process</td>
<td>3.94</td>
<td>0.72</td>
<td>2</td>
</tr>
<tr>
<td>Providing guidance without pressure is the key to being a good leader</td>
<td>3.91</td>
<td>0.89</td>
<td>3</td>
</tr>
<tr>
<td>Most employees want frequent and supportive communication from their leaders</td>
<td>3.88</td>
<td>1.07</td>
<td>4</td>
</tr>
<tr>
<td>Employees will exercise self-direction if they are committed to the objectives</td>
<td>3.84</td>
<td>1.05</td>
<td>5</td>
</tr>
<tr>
<td>Effective leaders give orders and clarify procedures</td>
<td>3.59</td>
<td>1.10</td>
<td>6</td>
</tr>
<tr>
<td>As a rule, employees must be given rewards or punishments in order to motivate them to achieve organizational objectives</td>
<td>3.13</td>
<td>1.26</td>
<td>7</td>
</tr>
<tr>
<td>Employees know how to solve organizational problems using creativity and ingenuity</td>
<td>3.03</td>
<td>0.78</td>
<td>8</td>
</tr>
<tr>
<td>In complex situations, leaders should let subordinates work problems out on their own</td>
<td>2.94</td>
<td>0.8</td>
<td>9</td>
</tr>
<tr>
<td>Employees can lead themselves just as well as the leader</td>
<td>2.84</td>
<td>0.99</td>
<td>10</td>
</tr>
<tr>
<td>It is the leaders job to help subordinates find their passion</td>
<td>2.78</td>
<td>1.36</td>
<td>11</td>
</tr>
<tr>
<td>Employees have the right to determine their own objectives</td>
<td>2.78</td>
<td>0.94</td>
<td>11</td>
</tr>
<tr>
<td>Employees need to be supervised closely, or they are not likely to do their work</td>
<td>2.66</td>
<td>0.83</td>
<td>13</td>
</tr>
<tr>
<td>Leadership requires staying out of the way of subordinates as they do their work</td>
<td>2.66</td>
<td>1.18</td>
<td>13</td>
</tr>
<tr>
<td>Most employees feel insecure about their work and need direction</td>
<td>2.63</td>
<td>1.04</td>
<td>15</td>
</tr>
<tr>
<td>In general, it is best to leave subordinates alone to achieve objectives</td>
<td>2.47</td>
<td>0.88</td>
<td>16</td>
</tr>
<tr>
<td>In most situations, employees prefer little input from the leader</td>
<td>2.34</td>
<td>0.90</td>
<td>17</td>
</tr>
</tbody>
</table>

Professional QSs were then asked to rate how they felt about each statement. These statements were then ranked according to importance. A majority of respondents felt that the leader should use his/her power to help employees grow. This illustrates that QS professionals are driven to succeed but require the assistance and mentorship of lead QSs.
in the organisation. This finding concurred with Zareen, Razzaq, & Mujtaba (2015) concerning the need for employee growth potential in the organisation.

At rank two (2) employees wished to be part of the decision-making process. They did not want to be simply told what to do but rather wished to offer insight regarding cost management issues and the management of clients.

At ranking three (3) and four (4), employees want communication and guidance regarding their tasks and project deliverables. This is contradictory to the laissez-faire leadership approach whereby there is lack of communication and guidance from the QS leaders.

QSs want clarity on tasks as they want to be committed to the company objectives. Transformational leadership approach drives subordinates to find their passion and align this passion with the company objectives.

A mean score of 2.94 was achieved when employees were asked if they should be left alone in complex situations. This is indicative that the laissez-faire approach was not preferred in this situation and that employees wanted guidance to help solve complex situations.

When asked if leaders should stay out of the way, the mean score was 2.66 which further indicated that QSs preferred mentoring by their leaders. A further mean of 2.63 was achieved when QSs were asked if they felt insecure about their work and needed direction. The result was that a transformational approach was required.
### 4.4.11 Leadership approach ranked according to strengths

Table 4.13 Leadership approach ranked according to strengths

| Leader uses his/her power to help employees grow | Transformational | 1 |
| Employees want to be part of the decision making process | Transformational | 2 |
| Providing guidance without pressure is the key to being a good leader | Transformational | 3 |
| Most employees want frequent and supportive communication from their leaders | Transformational | 4 |
| Employees will exercise self-direction if they are committed to the objectives | Transformational | 5 |
| Effective leaders give orders and clarify procedures | Transformational | 6 |
| As a rule, employees must be given rewards or punishments in order to motivate them to achieve organizational objectives | Transactional | 7 |
| Employees know how to solve organizational problems using creativity and ingenuity | Laissez-faire | 8 |
| In complex situations, leaders should let subordinates work problems out on their own | Laissez-faire | 9 |
| Employees can lead themselves just as well as the leader | Laissez-faire | 10 |
| It is the leaders job to help subordinates find their passion | Transformational | 11 |
| Employees have the right to determine their own objectives | Laissez-faire | 11 |
| Employees need to be supervised closely, or they are not likely to do their work | Transformational | 13 |
| Leadership requires staying out of the way of subordinates as they do their work | Laissez-faire | 13 |
| Most employees feel insecure about their work and need direction | Transformational | 15 |
| In general, it is best to leave subordinates alone to achieve objectives | Laissez-faire | 16 |
| In most situations, employees prefer little input from the leader | Laissez-faire | 17 |

Based on the professional QSs responses when asked to rate against each statement, a table showing ranking and the type of leadership was drafted in order to better understand the preferred leadership approach.

The study advances knowledge of the preference of transformational versus laissez-faire leadership. Implementation of a preferred leadership approach in any organisation is key to ensuring job satisfaction and achievement of objectives. Transformational leadership was ranked from 1 to 6 indicating that a majority of professional QSs preferred transformational leadership over laissez-faire characteristics.
4.4.12 Reliability test

Table 4.14 Reliability of results

<table>
<thead>
<tr>
<th>Construct</th>
<th>Cronbach’s Alpha</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>0.811</td>
<td>Very good</td>
</tr>
</tbody>
</table>

The reliability of results was determined by the Cronbach’s Alpha pertaining to the preference of leadership approach by professional QSs. Table 4.14 above shows a coefficient of 0.811 which is indicative of a very good level of reliability.

4.5 Chapter Summary

The purpose of chapter four was to investigate which of the leadership approaches were better suited for the QS profession in KwaZulu-Natal. For the purposes of the dissertation, descriptive and inferential analysis was adopted to analyse the survey respondents. In order to determine the consistency and reliability of the results obtained from the respondents, the Cronbach Alpha was used.

The results show that a large percentage of QS professionals were being led by the laissez-faire approach albeit they preferred the transformational leadership approach. They further believed that the leadership approach to their company was highly dependent on organizational success.

When questioned about the effect of using the correct and incorrect leadership approach towards the various stages and deliverables on projects, it was found that the transformational leadership approach performed better as opposed to the laissez-faire approach. This was not surprising given the performance of QSs over recent times where a majority of professional QSs were led based on the laissez-faire approach.

Professional QSs were also given the opportunity of choosing a characteristic of leadership that was either prevalent to transformational or laissez-faire where the majority of this sample selected transformational leadership characteristics. The next chapter is a detailed analysis of these results.
CHAPTER 5

Discussion

5.1 Introduction

This chapter summarizes the dissertation and provides a testing of the proposed hypothesis.

The primary objective was to examine which leadership approach; either laissez-faire or transformational approach was best suited for the quantity surveying profession within the South African province of KwaZulu-Natal. The achievement of this objective was dependent on satisfaction of secondary objectives, namely:

- Identifying which leadership approach promoted successful project delivery and met anticipated targets;

- Assessing the impact of the leadership approach against various stages in construction;

- To determine the key strengths and weaknesses of the laissez-faire versus transformational leadership;

- To identify a preferential model in terms of the transformational and laissez-faire leadership.

A review of the relative literature was undertaken in order to develop a framework for the dissertation. Survey questions were distributed to professional QSs throughout KZN using the SACQSP as a medium to distribute the survey. The data received was then reviewed and analysed.
5.2 Hypotheses testing

- **Hypothesis 1: Successful project delivery is dependent on adopting the correct leadership approach;**

  A study conducted by Saravo et al. (2016) showed that in order to maximise productivity, there needs to be clear expectations and adopting the correct leadership approach is crucial. Successful project delivery requires increased leadership performance and the leadership approach needs to be critically analysed and tested against objectives. This statement is supported by Tabassi et al. (2017) who found that the leadership approach is a useful construct in understanding team performance in overall project delivery.

  In the survey, the effect of using the correct and incorrect leadership approaches against project objectives, were requested from QS professionals. The results indicated that using the correct leadership approach (mean of greater than 4.21) yielded better performance against organisational deliverables.

  This hypothesis was further tested by requesting respondents to determine the negative effect of using the incorrect leadership approach which yielded a mean of greater than 3.77. This is indicative that using the incorrect approach in the QS profession is detrimental as far as achieving project delivery is concerned.

- **Hypothesis 2: The various stages of construction are either supported or hindered by the chosen leadership approach;**

  A study conducted by Tabassi et al. (2017) showed that the stages are either supported or hindered by the leadership approach as it has an effect on team performance. Agyekum et al. (2015) concurred with this finding and found that the leadership of QSs amongst the various stages determines the value that QSs add to the project. QSs are heavily criticised at each stage of the project and there is a greater need for accuracy as the project information increases in complexity. The chosen leadership approach is important to increase efficiency, overcome challenges and increase competitiveness.
In this study the performance of laissez-faire and transformational leadership approach was examined against the stages in the project, based on QSs responses. The results showed that using the laissez-faire leadership approach yielded a mean of less than 2.1. This is indicative of poor performance of this type of leadership, against the various deliverables in the project stages.

- **Hypothesis 3:** The strengths associated with transformational leadership approach outweigh the laissez-faire leadership approach when applied to the quantity surveying profession.

Skogstad et al. (2014) points out that there has been significant negative literature that has been published concerning laissez-faire leadership. On the other hand, transformational and transactional leadership has almost been viewed in a positive light and as a preferred leadership approach. Sharma & Singh (2013) contradicts this view and states that based on their findings, the laissez-faire approach works well for professionals who are experts in their fields, similar to that of a QS.

The study revealed a mean greater than 4.1 which proves that professional QSs believed that the weaknesses associated with a laissez-faire type of leadership outweighed its strengths.

- **Hypothesis 4:** The transformational leadership approach is the preferred leadership approach to the quantity surveying profession.

Raj and Srivastava (2016) state that the preference for transformational leadership lies in its drive for innovation which gains an edge over rival companies. This is further collaborated by Melvyn et al. (2014), who described organisational success being attributed to employees motivated to be innovative as they were driven by the leader.

In this study, QS professionals were requested to indicate based on their relative experience, their preference of leadership approach with transformational and laissez-faire characteristics. The results showed a mean of greater than 4.1 indicating that a large number of QS professionals preferred the transformational leadership approach.
5.3 Conclusion

This study examined two leadership approaches (laissez-faire and transformational) and its impact on the quantity surveying profession. This study confirms that the transformational leadership approach is better suited as the preferred method of being led by professionals QSs.

Not only do the results show that transformational leadership approach improve communication and innovation but it increases performance over the various stages in construction which has a direct impact on organisational success. Previous studies Yekum et al. (2015) and Usman (2012) described innovation as a key attribute in QS practices and failure to adopt a transformational approach, which encourages innovation, could lead to diminished scope and low margins for QSs.

Yildiz & Simsek (2016) states that transformational leadership leads to job satisfaction as subordinates are inspired by their leaders. Not only are subordinates inspired by leaders but Yen (2017) believes that good leaders do not create subordinates, they create leaders. The results show that a large proportion of professional QSs want to be part of the decision making process which is the stepping stone to becoming leaders.

The influence that lead QSs possess over subordinates play a crucial rule in the development of their foundation and guides them into fulfilling their objectives and meeting deadlines. The road to improving as a leader and reclaiming the reputation that was once earned by the QS demands commitment and a supportive team.

5.4 Summary

This chapter discussed the results of the study with the hypotheses. A concluding chapter follows and presents the limitations and recommendations.
CHAPTER 6

Conclusion and recommendations

6.1 Introduction

This chapter summarizes the dissertation based on the research findings presented in the previous chapters. The implications, limitations and recommendations are also discussed.

6.2 Conclusion

The study examined which leadership approach is best suited for the QS profession within the South African province of KwaZulu-Natal, which is laissez-faire or transformational approach. The achievement of this objective was dependent on satisfaction of secondary objectives, which were met. The findings are that although a laissez-faire leadership approach may have had successes in the past, to maintain project delivery going forward, a transformational leadership approach is required for the QS profession.

6.3 Implications of this research

Adoption of a transformational approach by QS leaders will improve client services offered at every stage of a project and improve project delivery.

6.4 Limitations of the study

The limitations of the research are as follows:

- Only QS professionals within the KwaZulu-Natal province were used in the sample;
- Only registered professionals who obtained their professional registrations with the South African Council for the Quantity Surveying Profession were used in the sample;
- This research paper focuses on the transformational versus the laissez-faire approach in quantity surveying but acknowledges that there are other leadership approaches which are briefly described in this dissertation.

6.5 Recommendations to solve the research problem

Due to QS leaders’ slow adaptation to change, a possible recommendation would be for them to adopt both the transformational and laissez-faire approach and slowly transition
into sole transformational leadership. This would ease both QS leaders and subordinates into the leadership approach and streamline the process of change in the industry.

6.6 Recommendations for future research

The following are recommendations for future research:

- It would be feasible to undertake a similar study across other provinces of South Africa to determine the best suited leadership approach for professional QSs. This would improve efficiency and reduce budget overruns in the future.

- The study was quantitative but a qualitative element could be added for future research. It would be eye-opening to understand professional QSs opinions on where the research may have been lacking.

- There is a need to examine the best suited leadership approach for candidate QSs who have little or no experience in the built environment. This leadership approach could contribute to laying a solid foundation for the candidate QS as they progress to a professional QS.

A trend in the QS link to leadership research is the observation of how QS leaders and subordinates process information, how it affects the relationship between project stages and the subsequent effect on the QS profession. Taking into account the findings of this study, it is imperative that QS practices adopt the leadership approach that is best suited for the progression of the profession, which is transformational method.
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Please record your details below to facilitate contacting you, should a query arise. Once again, please note that the data provided in this survey will be treated in the strictest confidentiality.

Full name

Organisation

Mobile

Email

Please record the level of education / qualification(s) you possess?

Please record your occupation?

Kindly indicate how many years you have worked in the quantity surveying sector in the built environment?

- O Less than 5 years
- O 5 – 10 years
- O 10 – 15 years
- O 15 – 20 years
- O 20 – 25 years
- O Over 25 years
APPENDIX A

Please record the type of organisation you work for?

- Consulting firm
- Contracting firm
- Other

Please specify if OTHER:

Please record the province where your organisation is based?

- Eastern Cape
- Free State
- Gauteng
- KwaZulu-Natal
- Limpopo
- Mpumalanga
- Northern Cape
- North West
- Western Cape

Kindly specify your organisation’s current leadership approach?

- Laissez-faire approach
- Transformational approach
- Other

* Laissez-faire approach – they give their employees complete freedom to make their own decisions regarding their work and step in only when required to do so. This is generally a passive leadership approach.

* Transformational approach – these leaders strive to inspire their followers to redirect their thinking to achieve a certain goal. These leaders create a vision and inspire people to follow it.

Please specify if OTHER:

Kindly specify your preferred method of being led?

- Laissez-faire approach
- Transformational approach
APPENDIX A

Kindly specify whether your quantity surveying organization is highly dependent on the leadership style?

O Yes
O No
O Unsure

Kindly rate on a scale of 1 (Not at all) to 5 (To a very large extent) the positive effect of using the correct leadership approach to the quantity surveying profession [please note the ‘Unsure’ (U) response]:

<table>
<thead>
<tr>
<th>Factor</th>
<th>1. Not at all</th>
<th>2. To a little extent</th>
<th>3. To some extent</th>
<th>4. To a large extent</th>
<th>5. To a very large extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased quality of documents</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Co-ordination of design team drawings for measure</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Cost planning accuracy</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Meeting deliverable deadlines</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Increased efficiency</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

Kindly rate on a scale of 1 (Not at all) to 5 (To a very large extent) the negative effect of using the incorrect leadership approach to the quantity surveying profession [please note the ‘Unsure’ (U) response]:

<table>
<thead>
<tr>
<th>Factor</th>
<th>1. Not at all</th>
<th>2. To a little extent</th>
<th>3. To some extent</th>
<th>4. To a large extent</th>
<th>5. To a very large extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exceeding original budget</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Lack of understanding the project</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Lack of professional standards</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Professional indemnity claims</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Threat to services conventionally provided by quantity surveyors</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Clash of responsibilities among professionals in the construction industry</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Decrease in the demand for quantity surveyors required in the industry</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
APPENDIX A

Kindly rate on a scale of 1 (Not at all) to 5 (To a very large extent) the performance of the following traditional roles and responsibilities of the quantity surveying profession when quantity surveyors use a laissez-faire leadership approach [please note the ‘Unsure’ (U) response]:

<table>
<thead>
<tr>
<th>Role</th>
<th>Unsure</th>
<th>1. Not at all</th>
<th>2. To a little extent</th>
<th>3. To some extent</th>
<th>4. To a large extent</th>
<th>5. To a very large extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing estimates</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Undertaking feasibility studies</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Providing pre and post tender advice</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Life cycle costing</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Preparing Bills of Quantities</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Providing procurement advice</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Compilation and adjudication of tenders</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Measuring work to date on site</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Preparing payment certificates</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Cost control</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Value engineering</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Preparation of final accounts</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

Kindly rate on a scale of 1 (Not at all) to 5 (To a very large extent) the performance of the following traditional roles and responsibilities of the quantity surveying profession when quantity surveyors use a transformational leadership approach [please note the ‘Unsure’ (U) response]:

<table>
<thead>
<tr>
<th>Role</th>
<th>Unsure</th>
<th>1. Not at all</th>
<th>2. To a little extent</th>
<th>3. To some extent</th>
<th>4. To a large extent</th>
<th>5. To a very large extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing estimates</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Undertaking feasibility studies</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Providing pre and post tender advice</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Life cycle costing</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Preparing Bills of Quantities</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Providing procurement advice</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Compilation and adjudication of tenders</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Measuring work to date on site</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Preparing payment certificates</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Cost control</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
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</tr>
<tr>
<td>Value engineering</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Preparation of final accounts</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
## APPENDIX A

Kindly rate on a scale of 1 (Not at all) to 5 (To a very large extent) [please note the ‘Unsure’ (U) response]:

<table>
<thead>
<tr>
<th></th>
<th>Unsure</th>
<th>1. Not at all</th>
<th>2. To a little extent</th>
<th>3. To some extent</th>
<th>4. To a large extent</th>
<th>5. To a very large extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees need to be supervised closely, or they are not likely to do their work</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Employees want to be part of the decision making process</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Providing guidance without pressure is the key to being a good leader</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>In complex situations, leaders should let subordinates work problems out on their own</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Leadership requires staying out of the way of subordinates as they do their work</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>As a rule, employees must be given rewards or punishments in order to motivate them to achieve organizational objectives</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Most employees feel insecure about their work and need direction</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>In general, it is best to leave subordinates alone to achieve objectives</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Effective leaders give orders and clarify procedures</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>In most situations, employees prefer little input from the leader</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>It is the leaders job to help subordinates find their passion</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Most employees want frequent and supportive communication from their leaders</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
APPENDIX A

Kindly rate on a scale of 1 (Not at all) to 5 (To a very large extent) [please note the ‘Unsure’ (U) response]:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Unsure</th>
<th>1. Not at all</th>
<th>2. To a little extent</th>
<th>3. To some extent</th>
<th>4. To a large extent</th>
<th>5. To a very large extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees can lead themselves just as well as the leader</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Employees know how to solve organizational problems using creativity and ingenuity</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Employees have the right to determine their own objectives</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Employees will exercise self-direction if they are committed to the objectives</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Leader uses his/her power to help employees grow</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

We thank you for your time spent taking this survey.
Your response has been recorded.
APPENDIX B

INFORMED CONSENT LETTER

Leadership approach to Quantity Surveying

Dear Sir/Madam

I’m a professional quantity surveyor currently studying MBA at the University of KwaZulu-Natal, Westville campus, Durban, South Africa. To determine the better suited leadership approach to the quantity surveying profession, I’m comparing the laissez-faire with the transformational approach. To gather the information, I’ve compiled a survey where I kindly require your assistance.

Please note that:

- Your confidentiality and anonymity is guaranteed as your inputs will not be attributed to you in person, but reported only as the profession’s member opinion.
- The survey should take roughly 10 minutes to complete.
- Any information given by you cannot be used against you, and the collected data will be used for purposes of this research only.
- Data will be stored in secure storage and destroyed after 5 years.
- You have a choice to participate, not participate or stop participating in the research. You will not be penalized for taking such an action.
- Your participation is entirely voluntary and you can withdraw at any time during the course of the study.
- Your involvement is purely for academic purposes only, and there are no financial benefits and profits involved.
- If you require any feedback or the results from the investigation, a summary of the key points will be provided to you if you leave your details on the declaration.

Please note this study is being completed in my personal capacity. If you have any queries or seek further information on any subject of the research you may contact me by email at melverng@gmail.com or call me on +27 81 767 3078.

My academic supervisor is Dr. Abdulla Kader who lectures at the Graduate School of Business and Leadership at the University of KwaZulu-Natal and is also a manager at Nedbank. Dr. Kader may be contacted by email at abdullak@nedbank.co.za.

Your contribution to this research is highly appreciated.

Kind Regards,

Melvern Govender (205505978) Supervisor: Dr. Abdulla Kader
APPENDIX B

INFORMED CONSENT LETTER

Leadership approach to Quantity Surveying

DECLARATION OF CONSENT

I……………………………………………………………………………… (Full Name) hereby confirm that I have read and understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT                                                     DATE

……………………………………… …………………………………

RESEARCHER

Full Name: Melvern Govender
University: University of KwaZulu-Natal
School: Graduate School of Business & Leadership
College: Law and Management Studies
Campus: Westville Campus
Proposed Qualification: Masters in Business Administration (MBA)
Email: melverng@gmail.com
Contact: 081 767 3078

HSSREC RESEARCH OFFICE

Full Name:
HSSREC Research Office
Govan Mbheki Building
Westville Campus
Contact:
E-mail:

SUPERVISOR

Full Name: Dr Abdulla Kader
University: University of KwaZulu-Natal
School: Graduate School of Business & Leadership
Westville Campus
Email: abdullak@nedbank.co.za
Contact: +27 82 901 0225
APPENDIX B

THE UNIVERSITY OF KWAZULU-NATAL
GRADUATE SCHOOL OF BUSINESS AND LEADERSHIP
MASTERS IN BUSINESS ADMINISTRATION
MELVERN GOVENDER

LEADERSHIP APPROACH TO QUANTITY SURVEYING
Survey/Questionnaire

Survey
The primary aim of this survey is to determine the leadership approach (laissez-faire vs transformational approach) best suited to the quantity surveying profession in KwaZulu-Natal. Kindly answer all the questions as all your responses will aid the profession.

Thank you for your time and effort.
The information provided in this survey will not be shared and will be treated with confidence.
APPENDIX C

BIOGRAPHICAL SKETCH

Melvern Govender – BSc (Hons) Quantity Surveying, PrQS

Melvern Govender was born in Durban, South Africa on the 10th April 1987. Melvern matriculated from Northmead Secondary School in 2004. From there he travelled around the country and later went on to study at the University of KwaZulu-Natal where he graduated with a Honours Degree in Quantity Surveying. After graduation in 2011 he joined an international multi-disciplinary consulting company and has been involved in a diverse range of projects in the years that followed. He is also a professional quantity surveyor and registered with the South African Council for the Quantity Surveying Profession (SACQSP).

Melvern has always been passionate about leadership and his experience in the quantity surveying industry prompted debate amongst colleagues and academics which gave rise to the research topic.
# APPENDIX D

## AREAS OF WORKPLACE SKILL / EXPERIENCE

<table>
<thead>
<tr>
<th>1.0</th>
<th>Inception</th>
<th>5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Developing project briefs and attending project initiation meetings</td>
<td></td>
</tr>
<tr>
<td>1.2</td>
<td>Advising on procurement policy for the project.</td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td>Defining the quantity surveyors scope of work and services and finalising the client/quantity surveyor professional services agreement.</td>
<td></td>
</tr>
<tr>
<td>1.4</td>
<td>Advising on economic factors affecting the project and on appropriate financial design criteria.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.0</th>
<th>Concept and Feasibility</th>
<th>10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Agreeing the documentation programme for the project.</td>
<td></td>
</tr>
<tr>
<td>2.2</td>
<td>Reviewing and evaluating design concepts – value engineering</td>
<td></td>
</tr>
<tr>
<td>2.3</td>
<td>Preparing preliminary estimates of construction cost</td>
<td></td>
</tr>
<tr>
<td>2.4</td>
<td>Assisting in preparation of financial viability reports/feasibility studies</td>
<td></td>
</tr>
<tr>
<td>2.5</td>
<td>Auditing space allocations against the initial brief.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3.0</th>
<th>Design Development</th>
<th>15%</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Reviewing the documentation programme.</td>
<td></td>
</tr>
<tr>
<td>3.2</td>
<td>Reviewing and evaluating design and outline specifications and exercising cost control</td>
<td></td>
</tr>
<tr>
<td>3.3</td>
<td>Preparing detailed estimates of construction cost.</td>
<td></td>
</tr>
<tr>
<td>3.4</td>
<td>Reviewing the financial viability report / auditing of Cost Budget Estimates</td>
<td></td>
</tr>
<tr>
<td>3.5</td>
<td>Preparing area schedules and advising on space and accommodation allowances</td>
<td></td>
</tr>
<tr>
<td>3.6</td>
<td>Advising on escalation formulae and their implementation</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4.0</th>
<th>Documentation and Procurement</th>
<th>20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>Assisting in the formulation of the procurement strategy for contractors.</td>
<td></td>
</tr>
<tr>
<td>4.2</td>
<td>Reviewing working drawings for compliance with the approved budget for construction cost and/or financial viability.</td>
<td></td>
</tr>
<tr>
<td>4.3</td>
<td>Preparing documentation for both principal and subcontract procurement including the measurement and design of work, and the drafting of preliminaries, preambles and contract conditions.</td>
<td></td>
</tr>
<tr>
<td>4.4</td>
<td>Taking off of quantities and preparing price determination documents, including abstracts, schedules and pricing specialist construction elements in accordance with industry practice norms (Minimum 100 hours) – Refer to PSM 1</td>
<td></td>
</tr>
<tr>
<td>4.5</td>
<td>Preparing schedules of quantities for engineering works (civils, structural, piping and electrical) and the various methods of measurement</td>
<td></td>
</tr>
<tr>
<td>4.6</td>
<td>Advising on selection of tenderers</td>
<td></td>
</tr>
<tr>
<td>4.7</td>
<td>Calling of tenders and/or negotiation of prices</td>
<td></td>
</tr>
<tr>
<td>4.8</td>
<td>Evaluating and reporting on tenders, including clarification meetings</td>
<td></td>
</tr>
<tr>
<td>4.9</td>
<td>Preparing contract documents</td>
<td></td>
</tr>
<tr>
<td>4.10</td>
<td>Advising on the different forms of construction contracts available for projects (JBCC, FIDIC, NEC, GCC)</td>
<td></td>
</tr>
</tbody>
</table>
### APPENDIX D

<table>
<thead>
<tr>
<th>4.11</th>
<th>Understanding the roles, requirements and responsibilities of cost engineers and the use of cost elements (WBS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.12</td>
<td>Preparation of health and safety requirements for building projects</td>
</tr>
<tr>
<td>4.13</td>
<td>Preparation and application of health and safety requirements per engineers requirements, particularly on Mining Projects</td>
</tr>
</tbody>
</table>

#### 5.0 Construction 35%

<table>
<thead>
<tr>
<th>5.1</th>
<th>Attending site handover and regular site, technical and progress meetings</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.2</td>
<td>Preparing schedules of predicted cash flow</td>
</tr>
<tr>
<td>5.3</td>
<td>Cost control during progress of the works including advising on proposed variations and on alternative construction methods and sequencing.</td>
</tr>
<tr>
<td>5.4</td>
<td>Reporting on cost variations and contractual issues.</td>
</tr>
<tr>
<td>5.5</td>
<td>Adjudication and resolving financial claims by the contractor, subcontractors and/or suppliers</td>
</tr>
<tr>
<td>5.6</td>
<td>Preparing valuations for interim payment certificates and reconciliation statements</td>
</tr>
<tr>
<td>5.7</td>
<td>Measuring and recording site information for final account purposes.</td>
</tr>
</tbody>
</table>

#### 6.0 Close Out 10%

<table>
<thead>
<tr>
<th>6.1</th>
<th>Preparing and agreeing final account(s) for the works.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.2</td>
<td>Preparing valuations for final payment certificates and reconciliation statements</td>
</tr>
<tr>
<td>6.3</td>
<td>Preparing fee accounts based on appropriate fee scale and conditions of appointment</td>
</tr>
</tbody>
</table>

#### 7.0 Specialisation 5%

<table>
<thead>
<tr>
<th>7.1</th>
<th>Project planning and project management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Planning or programming of contract works</td>
</tr>
<tr>
<td></td>
<td>- Procurement of plant and materials</td>
</tr>
<tr>
<td></td>
<td>- Resource determination, scheduling and purchasing</td>
</tr>
<tr>
<td>7.2</td>
<td>Dilapidations and maintenance</td>
</tr>
<tr>
<td>7.3</td>
<td>Office management, resource allocation and budgeting</td>
</tr>
<tr>
<td>7.4</td>
<td>Taxation allowance and grants</td>
</tr>
<tr>
<td>7.5</td>
<td>Insurance</td>
</tr>
<tr>
<td>7.6</td>
<td>Litigation and arbitration</td>
</tr>
<tr>
<td>7.7</td>
<td>Insolvency and liquidation</td>
</tr>
</tbody>
</table>
09 November 2017

Mr Melvern Govender (205505978)
Graduate School of Business & Leadership
Westville Campus

Dear Mr Govender,

Protocol reference number: HSS/1985/017M
Project title: Leadership approach to Quantity Surveying

Approval Notification – Expedited Approval

In response to your application received on 19 October 2017, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application 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.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

Dr Shamila Naidoo (Deputy Chair)

/ms

Cc Supervisor: Dr Abdulla Kader
Cc Academic Leader Research: Dr Muhammad Hoque
Cc School Administrator: Ms Zarina Bullyraj
Leadership Approach to Quantity Surveying

**ORIGINALITY REPORT**

<table>
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**PRIMARY SOURCES**

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<td><a href="http://www.sagepub.com">www.sagepub.com</a></td>
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Exclude bibliography: On
Exclude matches: < 1%