

# The Validations of Future Technological Operational Business Needs for Sustainable Competitive Advantage

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## **Declaration of authenticity**

I declare that the research project, the validations of future technological operational business needs for sustainable competitive advantage, is my own work and that each source of information used has been acknowledged by means of a complete reference. This dissertation has not been submitted before for any other research project, degree or examination at any university.



Frederik Raath (As requested, will be replaced with Signature on PDF submission)

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## Abstract

The purpose of the study was for the researcher to examine the key success criteria to validate and predict future technological operational business needs for a sustainable competitive advantage. The study followed a qualitative methodology due to the researcher's need to deeply understand people's individual experiences around specific social spectacles. The data analysis method, therefore, aligned with a qualitative, exploratory study, using an inductive mode of enquiry. This approach was best suited for the system thinking epistemology and a relativist ontology of the researcher. The researcher conducted semi-structured interviews in the data collection procedure using snowball sampling to identify research participants.

The study concluded, and specifically in this order, that if an engaging and successful culture was in place, the execution of the change management process seemed more successful and less painful for all involved. This approach enabled the organisation or business unit to be more customer-focused or customer-centric, which appeared to be the main goal to *delight* future customers and gain a sustainable competitive advantage in the market.

Thus, the dissertation offers an in-depth view of what the success criteria and successful model need to be for sustainable competitive advantages in the ISP and ICT environment. The researcher suggests that ongoing research needs to be done to clearly understand the success criteria to gain new customers for a sustainable competitive advantage. The research explored what it means to be customer centric as the meaning is expected to change at the same rate as what technology and innovation are changing. The research journey was tedious and challenging because of commitments as essential services and the researcher had to put a safety net in place to manage the challenges. This resulted in extra care and control over data collection and analysis. Finally, the study was in its final stages of conclusion during the COVID 19 pandemic outbreak, which as a result, was not included in the focus of the study, nor did the study place a focus on the 4<sup>th</sup> Industrial Revolution, hence the researcher recommends these for further study.

In conclusion, the researcher is content that the aim and the objectives of the study were met, within certain limitations. The researcher acknowledges that the use of additional means of data collection such as focus group discussions could have been extended. Since the focus of the study was on FastNet as an institution, the sample size of the research was limited and may have been larger, which would have assisted in representing a higher percentage of the population. The final limitation is the lack of more international representatives.

### **KEYWORDS:**

Change management, customer-centric, effectivity, operational environment, organisational culture.

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## List of Acronyms

DAP	Data analysis procedures
FAB	Fulfilment Assurance and Billing
ICT	Information and Communication Technologies
ISP	Internet Service Provider
CRM	Customer Relationship Management
IoT	Internet of Things
POS	Point of Sale
WCS	Wireless Connectivity Services
KPI	Key Performance Indicators
BPI	Business Process Improvement
SOP	Standard Operating Procedure

# CHAPTER 1

## Scope and Nature of the Study

### 1.1 Introduction

The journey that the researcher has been part of over the last 15 years within the Information and Communication Technologies (ICT) and Internet Service Provider (ISP) environments was an exciting, yet challenging, experience. It almost felt like every time one was on the verge of having everything under control and gaining some competitive advantage, disruptive factors from within the organisation or external factors changed that impression – and the situation. The operational landscape within the technology and networking sectors is constantly changing. One of the core reasons for this is the speed with which technology and innovation are advancing and developing (Tidd, Bessant & Pavitt, 2005).

The researcher believes that there may be several reasons for this constantly changing behaviour within the ICT and ISP contexts. One of the main reasons is the ever-increasing and changing expectations of the customers (Young, 2004). The customers are increasingly becoming more knowledgeable about technology and expect more and more at the same price (Goleman, 2017).

The study came about as a result of the curiosity to examine and explore all the elements and factors on how to remain relevant and in-demand going forward operationally within the ISP and ICT environment. FastNet/BCX has been in a transition phase over the last eight years to convert its existing operational business unit to be applicable, relevant and in demand in the future. The reason for referring to the company as FastNet BCX throughout the dissertation is that FastNet was acquired by BCX in April 2018.

One of the focus areas for “future products” within FastNet BCX was the Internet of Things (IoT) type of services and products. IoT can be defined as a network constituted by uniquely identifiable commodity objects or devices equipped with some sensing system (Sharma, Chang, Tim, Wong & Gadia, 2016).

As mentioned above, the experience within the ICT and ISP environment that the researcher has gained over the last twelve years has highlighted that the expectations of the customer have changed drastically and will continue to change. The customer, according to Blazevic and Lievens (2008), will continue to expect more valued-added services from existing products or new services at the same cost or even at a reduced cost. These added services, according to the researcher, are one of the most critical challenges that the industry is facing, challenging various existing business models and structures. Gong (2016) specifies that IoT promises to do nothing short of revolutionising the way the world does business. It is expected that 51% of the best companies within the IoT industry will revolutionise the landscape by 2020 — which is this year.

The aptitude to sense and control the physical world through sensor-enabled devices can unlock massive, previously unseen opportunities to expand revenue, optimise operations and *delight* customers and users (Anon., n.d.). *Delighting* customers in the context of this study is a term that is strategically used by BCX FastNet and can be defined and understood as an expression to give the customer great pleasure or satisfaction. The term *delight* or *delighting customers* will be mentioned throughout the research document repeatedly.

In contrast, compare this with South Africa's existing communication providers like Telkom, where the primary aim is to provide more standardised services such as satellite, fixed-line connectivity, Wi-Fi, data, voice, point of sale and network solutions (Barber, Fung, Toshniwal, Voorheis & Harvey, 1999). All the above-mentioned aspects have led to the formation of the problem statement, which is to predict the success criteria characteristics from an operational point of view to delight future customers for a sustainable competitive advantage. This will be unpacked in Chapter Two.

## **1.2 Ontology**

The Greek word philosophy means love of knowledge. A philosopher is someone who loves to know and understand the world. The world around us is very large and complex, so philosophy, since its beginnings in ancient Greece, has been divided into various branches focusing on different aspects of the world. Two of these branches are ontology and epistemology (Russel, 2009).

Ontology can be defined as "the science or study of being and it deals with the nature of reality". Ontology is a system of belief that reflects an interpretation by an individual about what constitutes a fact (Burrell & Morgan, 2017). Ontology is concerned with the nature of reality, and Saunders and Lewis (2012) argue for two types of reality, namely objectivism and subjectivism. Objectivism argues that social entities exist external to and independent of social actors or researchers (Saunders & Lewis, 2012). Subjectivism, in contrast, is a particular statement that can be true for one person and false for another, based solely on one's mental choices, subjective processing, or emotions (Saunders & Lewis, 2012).

The researcher has been in a working environment from the age of 16 and has seen how technology and innovation have developed and what impact these areas have had on our day-to-day activities that have been nothing less than extraordinary. Gatignon, Gotteland and Haon (2016) confirm that the impact that technological changes and advancements will have on the performance of an organisation will be immense. The researcher's ontological perspective is that he sees himself as being a practical person who needs to expect some kind of positive outcome or state related to what he is doing and believing. The tool that the researcher will use for this ontological perspective will be systems thinking, which will be elaborated on under the epistemology section.

The researcher believes that he and the research problem are linked in a practical way, which reflects the meaning of Coghlan (2019), who stated that who we are and how we understand the world is a central part of how we understand others, the world and ourselves. The researcher aimed to be as neutral as possible throughout the research to have a clear understanding and expectation of the nature of innovation, technology and people. The researcher as a relativist would ensure that his

objectivistic approach counters possible bias. As Chang says, one source of the truth is debatable (Chang, 2017).

The researcher is a firm believer that a person needs to first get the basics right in what you do, earn your respect and credibility and then work your way up. The reason why this is important to the researcher is that is how he was brought up and how he understands business principles. Certain aspects of the researcher's experience were gained through hard work and working his way from the bottom up. The researcher who do not expect any favours or largesse from anyone and accredits his successes to hard work and determination. The researcher also lost his father just after finishing matric. All these instances contributed to the researcher having a relatively direct approach, however, still appreciate the researcher's need to deeply understand people's individual experiences when managing and leading people. This code has led to the researcher having a relativist outlook and approach to life.

The researcher, by being extensively engaged in projects and project execution over the last 20 years, realised that the different attributes of team members influence the urgency with which team members respond to project-related challenges, and that managing people is not an exact science (Hoever, Zhou & van Knippenberg, 2018). This contributed to the researcher regarding himself as a relativist. The researcher also grew up during very interesting and exciting times technology-wise over the last 20 years, from not being dependent on technology to a time when it is almost impossible to function and operate without technology. This had a direct impact on how the researcher sees, utilises and understands technology and innovation. The researcher's ontology is, therefore, subjective and he is a relativist by nature.

### **1.3 Research Problem**

What does it take to delight future customers? The research problem will address these requirements in more detail, discussing what is required operationally to delight future customers. The technology and communication industry have consistently been experiencing increasing problems when it comes to the fulfilment of clients expectations and supporting new products together with existing services (Bower, 2018). The researcher has been experiencing these problems first-hand over the last decade.

The researcher has determined that these problems can be split into three different categories:

1. The first research problem arises from project execution challenges and fulfilment obstacles and shortcomings that the researcher has experienced over the last decade that lead to customer dissatisfaction, unexpected cost, as well as lost revenue, which had a direct impact on the customer's experience.
  - a. Examples that highlight these challenges and obstacles are the extended and unplanned time required on-site to complete the fulfilment processes, as well as being able to show value to the customer in line with what was sold to him.
  - b. Unexpected cost is usually due to unforeseen factors, for example, the need to spend additional time on-site as floor plans of the site differed from the actual layout, or

because the required-on-site contact was not available. Another reason is that the skill required to complete the installation differed from the skill previously costed or planned, due to not having all the facts when the quotation was presented and signed.

2. The second research problem concerns the success rate or lack thereof relating to the internal change management process that organisations venture into to be able to deliver their new products and services. According to the researcher, this indicates, as confirmed by Hayes (2018), the challenges existing teams and structures face when implementing existing processes and procedures when dealing with new products within the ISP and ICT environment.
  - a. The current BCX/FastNet team has failed to successfully execute the change management process over the last couple of years. The two main reasons for this, according to the researcher, are (i) because the existing team did not consider the change management process seriously enough, as they expected that it was not needed and that the existing structures, process and systems would be sufficient to deal with the new IoT-related products and services. (ii) The second reason for this, according to the researcher, was that there were no clear reporting tools and visibility in place to manage and report on the success of the change management process.
3. The third research problem emanated from the existing staff's approach and attitude to succeed as regards these future products, as well as their attitude and willingness concerning the change required. This speaks directly towards the culture of the staff and the organisation. This means that some opportunities were missed when the opportunity presented itself.

The researcher anticipates to find three reasons for this problem:

1. The first could be that the existing staff members are set and complacent in their comfort zone, secure in what they have been doing for the past ten years.
2. Another reason may be that the staff do not understand why this new or different approach was needed.
3. The third reason pertains to the attitude or level of skills of the staff members. Some staff members may not have the required level of skill to do the work successfully and other staff members might not want to expose themselves, as they could be afraid it would make them more vulnerable. (These points may say more about the culture of the organisation.)

All three of the problems listed led the researcher to formulating the problem statement, recognising that the elements of all three of these problems need to be investigated to allow the researcher to establish the success criteria and characteristics for future products within the ICT and ISP environment to delight future customers. This needs to include change management as well as the required cultural fit within the organisation.

## 1.4 Aim and Objectives

With the research problem being confirmed, the next step that the researcher took was to validate the aims and objectives of the research. These aim and objectives reflect the results that the researcher expected to achieve with the research.

The aim of the study should address the ‘aspiration’ of the study, namely, what does the study hope to achieve. The aim should, therefore, identify the main purpose of the study (Suskie, 2018). The aim of the research is as follows:

*To predict the success criteria characteristics, from an operational point of view, that will allow the organisation to gain a sustainable competitive advantage by delighting existing and future customers within the ICT and ISP environment.*

In developing management research questions and objectives, the Management Research Question hierarchy of Cooper, Schindler and Sun (2003) was followed for the qualitative research. Qualitative research, according to Cooper *et al.* (2003), include an array of interpretive techniques, which seek to describe, decode, translate, and otherwise come to terms with the meaning not the frequency of certain naturally occurring phenomena in the social world.

The three objectives (see Table 1.1) all relate and refer to the points raised in the research problem. The researcher expected the objectives would assist in achieving what was set out in the aim of the research. The researcher has listed the objectives in a table format so that it would be easy to validate and separate the three.

Table 1.1: Objectives of the study

Objective	Explanation
First objective	Validating the successful criteria characteristics from an operational point of view that are expected to delight existing and future customers within the ICT and ISP environment.
Second objective	Detect the key success criteria relating to effectively execute the change management process continuously within the ICT and ISP environment. This refers to the question of whether change management has to become an embedded function in the organisation to ensure operational success that will add value to customers within the ICT and ISP environments continuously.
Third objective	Predicting what type of culture is required that will support on-going success as well as an operational success within the ICT and ISP environments.

The researcher believes that once these three objectives have been achieved that there will be convincing evidence of what is required to delight future customers and remain relevant. Furthermore, there were primary and secondary research questions that assisted the researcher to achieve these objectives. These will now be discussed in more detail.

## **1.5 Primary Research Question and Secondary Research Questions**

As with the aim of the study where the objectives unpacked the aim, the secondary research questions (sub-questions) are expected to deconstruct the primary research question. In qualitative studies, the researcher will always have a secondary research question, according to Maree and Van der Westhuizen (2009).

The primary question is the following:

What kind of framework will ensure the operational success criteria for a sustainable competitive advantage that will add value to customers within the ICT and ISP environments?

The researcher has determined three secondary questions in line with the primary question, research problem and objectives that need to be answered: Firstly, what the performance criteria are for ongoing operational success within the ICT and ISP environment. Secondly, what organisational characteristics would detect and predict effective change management within the ICT and ISP environment? Thirdly, what predicted elements are required to establish the right culture fit within an organisation?

These three secondary questions relate and embody the problem statement as well as the objectives of the research. It is expected that these questions and answers will overlap with each other, meaning that some answers and feedback are expected to be relevant to more than one question.

## **1.6 Epistemology**

Epistemology relates to the theoretical lens that the researcher chooses to view the problem that will be addressed. Epistemology is often referred to as 'the philosophy' or 'the paradigm' of the study (Creswell, 2013). Epistemology and ontology are two different ways of viewing the research philosophy or problem. Epistemology is how we know things, how we come to know them, thus implying the relationship between the researcher and the reality (Richardson & St Pierre, 2008).

Epistemology is also the theory of knowledge, especially regarding its methods, validity and scope, and the distinction between justified belief and opinion. Important aspects here are matters such as interpretivism and constructivism (Johnson & Onwuegbuzie, 2004). Epistemology, as a lens or tool, is expected to assist the researcher in understanding the problem that has already been identified and described in the problem statement (Creswell, 2013). The reasoning behind the systems thinking approach is that it will provide a very powerful tool by enabling the researcher to gain insight into the context in which he or she has to operate (Senge & Sterman, 1992). Systems thinking is also expected to assist the researcher to move away from working with the idea of the obvious problem that requires a solution (Senge & Sterman, 1992).

Systems thinking models are thought of as embodying only pure ideas of purposeful activity rather than being descriptions of the real world. They are used as a source of questions to ask of the real situation (Senge & Sterman, 1992). Systems thinking utilises habits, tools and concepts to develop an understanding of the interdependent structures of dynamic systems (Prochaska & Norcross, 2018).

Lack of systems thinking produces a mental model based mostly on what can physically be seen. This tends to give a shallow understanding of the systems way (Leveson, 2011). The approach of systems thinking is fundamentally different from that of traditional forms of analysis (Prochaska & Norcross, 2018). The traditional analysis focuses on separating the individual pieces of what is being studied; in fact, the word “analysis” comes from the root meaning, “to break into constituent parts (Leveson, 2011)

Systems thinking is expected to emphasise how the researcher will focus on key elements for future technological operational business needs, as well as what delighting future customers means. This will include how these needs will be studied, in comparison with how the day to day operations environment currently functions (Swartz, 2020). A particularly central issue is whether or not the social world can and should be studied according to the same principles, procedures and ethos as the natural sciences. The position that affirms the importance of imitating the natural sciences is invariably associated with an epistemological position known as positivism.

As mentioned above, the researcher’s epistemology is subjectivism, so that by looking at the relationship between a subject and an object the idea of epistemology and how it influences the research design can be explored. This will be the researcher’s epistemology.

## **1.7 Theoretical Framework**

The theoretical framework is the body of knowledge within which the study is placed (LeVine, 2018). The purpose of the theoretical framework is to evaluate and study what is already known about operational performance criteria within the ICT and ISP environment, as well as current success criteria on change management and culture. This is the central piece of the research plan (Ennis, 1999).

Theoretical frameworks are usually based on the propositional statements that result from existing theories according to Saunders *et al.* (2012), who also describe the theory as “the structure, the scaffolding, and the frame of your study”. The framework for the researcher’s theory will be based on the aim, objectives and the research questions. The theoretical framework will be expanded on in Chapter Two. Systems thinking will be used (as explained under epistemology) as the lens through which the researcher looks at the problem. The reason why systems thinking would be used is that it would force or enable the researcher to think and explore the subject on hand differently than his normal thought patterns would allow. It is then expected to highlight or point out other improved avenues or better practices to achieve the goals.

In the literature review, the researcher will use the skill of systems thinking to unpack the problem and gaps, and in Chapter Three and Four he will analyse new literature and understand how it can fill the gaps that were highlighted by the research problem. The literature review will allow the researcher to better understand the components contributing to effective change management towards a “future” environment, including the expected model to delight future customers. The literature review will shed light on all the elements and factors addressing the research problems stated.



There is relevant literature related to the topic which will be explained under the theoretical framework and in more detail in Chapter Two. The researcher expects that most of the organisations within the ISP and ICT environment are all focused in some way or form on growing their revenue and keeping up with the economy and inflation. The reason why this is important to the researcher is to highlight the continuous need that is being experienced and the drive to add value to existing customers and new customers. This talks directly to change management as well as the attitude/culture of the organisation to continuously perform and deliver successfully.

There have been continuous planning sessions and strategies taking place within FastNet/BCX over the last ten years, based on the same models, principles and concepts from previous years. These models and business plans only vary slightly from year to year. This conservative approach has been used to make sure that there is not too much deviation from previous years and that we continue the same product, service and customer focus year after year.

These models, principles and concepts are briefly highlighted below and will be explained in more detail in Chapter Two in the literature review.

### **1.7.1 Existing processes and systems**

Firstly, there is the current Business Process Management Life Cycle that is used as a strategic planning methodology aimed at validating the operations or employee skills that should be improved on to encourage smoother procedures. This process indicates the existing framework within FastNet BCX as to how the Business Process Life Cycle is currently managed.

BCX FastNet's current framework and approach to become and remain the market leader are that of breaking it down into four focus areas. These focus areas are product leadership, differentiated services, organisation effectiveness and customer relationship excellence. Driving performance within the team to achieve growth is also part of the current strategy. This refers to the culture of the team and working towards the best fit for the organisation to get the best performance out of the staff members or team. The steps included in driving this performance and how it relates to the current performance enablement pyramid method will be explained in more detail in Chapter Two.

One other reality within the telecoms industry is that of churn. Churn is the rate at which you are losing customers or revenue through subscription cancellations. One of the main reasons for continuous churn within the telecoms industry is that there are a higher number of role players and competitors now compared to ten years ago, operating and competing in this space. This is the one reason; the other reason being the impact that technology and innovation are having on ICT and ISP-related products. Customers expect more value-added services at the same price.

This means that the customer is being spoilt for choice as well as there is a healthier competition between the various ISP and ICT providers. The impact that churn has on the growth of the organisation as well as on how it is currently managed, will also be discussed in Chapter Two. The need and demand for Customer Relationship Management systems (CRM) have also increased over the last ten years. Lu, N., Lin, Lu, J. and Zhang (2014) confirm that with the rapid growth of digital systems and

associated information technologies, there is an emerging trend in the global economy to build digital customer relationship management (CRM) systems.

The last two problems that the researcher has highlighted is that of change management and the impact of the culture of the organisation: This refers to the current approach and method of how existing leadership teams and organisations handle the VUCA world. (VUCA world stands for volatility, uncertainty, complexity and ambiguity challenges that are being experienced within the market and work environment). These VUCA challenges have affected the current strategies, leading to the need to more frequently enforce change management within the organisation. To be able to handle these continuous change management processes successfully has been, and remains, a challenge within the BCX FastNet team.

These challenges refer directly to the culture of the organisation, in the opinion of the researcher. The current framework in which people are involved is taxing and time-consuming. The current expectations are that each team member is motivated and engaged, with a clear understanding of what is required to contribute to the future drivers of the operational environment, which would be an ideal world. This also includes new and required skills levels, cross-skilling and attitude, to name but a view factors, which will also be elaborated on in much more detail in Chapter Two.

## **1.8 Limitations**

Limitations are those factors that make it difficult to achieve what you want to achieve. All studies have limitations, being the flaws or shortcomings, which are highlighted and acknowledge at the start of the research process. The limitation of this study can be characterised as follows: The findings and analysis of this study were based on a limited number of participants that represented the ICT and ISP industry. Interviews were conducted with seven participants, meaning the findings were based on a small sample and therefore cannot be generalised across a large population.

## **1.9 Theory Development**

A qualitative approach was followed, as highlighted by the researcher, together with a general inductive reasoning approach for data analysis. Thomas (2006) states that the purposes of using an inductive approach can be broken down into three points, which are the following:

1. Firstly, to condense raw textual data into a brief, summary format.
2. Secondly, to establish clear links between the evaluation or research objectives and the summary findings derived from the raw data.
3. Lastly, to develop a framework of the underlying structure of experiences or processes that are evident in the raw data (Thomas, 2006).

Although the general inductive approach is not as strong as some other analytic strategies for theory or model development, it does provide a simple, straightforward approach for deriving findings in the context of focused evaluation questions (Thomas, 2006). The researcher wants to accentuate that the inductive approach does not imply discounting theories when formulating research questions and objectives. The inductive approach is expected to provide an easily used and systematic set of

procedures for analysing qualitative data that can produce reliable and valid findings (Thomas, 2006). It does not prevent a researcher from using existing theory to formulate the research question to be explored, as well as learning from experience as being part of the qualitative approach (Johnson & Christensen, 2008).

A researcher further recognises that patterns, resemblances and constancies in experience (premises) are experiential to reach conclusions (or to generate theory). Inductive reasoning begins with detailed observations of the world, which moves towards more abstract generalisations and ideas (Johnson & Christensen, 2008). When following an inductive approach, beginning with a topic, a researcher expects to develop empirical generalisations and define preliminary relationships as he or she progresses through his research, which will assist the researcher in reaching conclusions, or to generate theory.

With reference to this research, at the end of each interview, the respondent was asked whom he suggested the researcher should include in the study. This is known as snowballing sampling. The reason for using this sampling method lies in the relationship and similarities between the respective leadership roles and responsibilities within the ICT and ISP environment. It is a relatively small environment and various companies work together or interact through joint ventures and business collaborations.

### **1.10 Chapter Overview**

The researcher is content with the introduction to his research paper. The researcher thinks that sufficient emphasis and layout was provided clearly in Chapter One to guide him throughout the research process.

The researcher believes that he will challenge his thought patterns and systems thinking daily and acknowledges that what has worked yesterday would most likely not work in the future. The researcher is positive that by following the above process he will get the answers that he is looking for to predict the success criteria characteristics from an operational point of view to delight future customers.

The following chapter, Chapter Two, will discuss the current literature that is available regarding the prominent objectives and problems. This will be evaluated to measure what is still relevant and what is not. This process is expected to assist the researcher in designing and preparing the interview questions. Chapter Three will address the research design and methodology that was used for the research. Chapter Four will be a presentation and discussion of the findings and Chapter Five contains the conclusion and recommendation going forward regarding this topic

## CHAPTER 2

### Theoretical Foundation and Literature Review

#### 2.1 Introduction

This chapter provides a review of the literature that is available at present regarding the characteristics and processes currently being used from an operational point of view, and the effect thereof on the customers within the ICT and ISP environment. It will focus on the current knowledge, literature and understanding concerning the various objectives and problems listed.

The purpose of this chapter is to break down, evaluate and document what is currently known and understood as regards the problems and goals relating to the primary and secondary questions, the primary question being what kind of framework will ensure the operational success criteria for a sustainable competitive advantage within the ICT and ISP environments. The three secondary questions, namely what the performance criteria are for ongoing operational success within the ICT and ISP environment; what organisational characteristics would detect and predict effective change management within the ICT and ISP environment and what the predicted elements are that are required to establish the right culture fit within an organisation will also be taken into account.

The researcher expects that by doing this, key points, gaps and unknowns will be highlighted that will assist the researcher in defining and documenting his interview questions. This will be broken up into the three main focal points of the literature review which are, in the first instance, the existing methods, processes and systems that are being used to fulfil and support existing customers within the ICT and ISP environment. This includes the characteristics of what is needed to delight these customers. The second focal point will be the current methods on how change management is being handled and implemented, and what currently is classified and listed as the success criteria within the existing ICT and ISP environment relating to change management process. Lastly, what the current success or evaluation criteria are in understanding the culture of the organisation and what effect or impact it has on the first two focal points will be discussed. All three of these focal points are related directly or indirectly to the research problem that was highlighted in Chapter One.

##### 2.1.1 Customer Experience in the ICT and ISP Environment.

The company that the researcher has been part of for the past eight years is one of the front-runners and leading providers in the Internet Service Providers (ISP) and Information, Communication and Technology (ICT) environment in South Africa. There have been several lessons learned, success stories, failures and successful case studies that the researcher will reflect on and use as literature on which to base some criticism and findings throughout the research journey (Parrot & Meyers, 2015).

Skills shortages and the lack of ability to adapt fast enough within the existing communication business units, as well as internal factors within South Africa, have all been perceived to have a direct impact on the success rate of the ICT environment. (Glyptis, Christofi, Vrontis, Del Giudice, Dimitriou &

Michael, 2020), according to the researcher. It is also important to understand that during the transition period, business as usual (BAU) products and services need to continue as always and cannot be neglected or deprioritised. What the researcher has experienced over the last eight years is that when all the focus was on new products and opportunities, the existing products and the customers were neglected, which led to a higher number of cancellations and a decline in revenue.

These modern-day products and services on offer within the ISP and ICT environment come with their own set of operational challenges. These challenges, obstacles and disruptive factors have been the pivotal cause and motive for the researcher to start on this research and dissertation journey. What became clear over the last ten years during various interactions and discussions with colleagues and other industry experts was that similar challenges and obstacles were being experienced. One of these challenges was the constant need to remain relevant from an operational and existence point of view by overcoming obstacles to converting established ICT and ISP operational business units to be able to fit and remain relevant going forward (Grayson & Jane, 2017).

In the early 1900s, operational structures and processes within the ICT and ISP industry were very different (Barber et al., 1999), as there were only limited offerings and services available. The limited offerings and available services have changed quite significantly over the last decade due to the impact technology and innovation had on building capabilities. Marcelle (2005) highlights endogenous factors such as cultural change, leadership and organisational integration as factors that influence the ability of telecom firms to build capabilities. This was similar to the experience that the researcher had over the last twelve years.

Since the 1980s there have been advances in technological and innovative developments that have seen the need for less human interaction and more system- and process-driven interactions (Preece, Rogers & Sharp, 2015). The need to decrease cost, introduce market variation and improve compliance has also never been greater in the ICT and ISP environment. Local and international businesses and organisations of all sizes are, therefore, focusing on several new products and solutions, such as IoT products to save cost, be more productive and profitable (Gangotri & Shankar, 2016).

Delighting future customers means an increasing call for a more comprehensive conceptualisation of customer delight (Mandal, 2020). The customer delight goes beyond extreme satisfaction, joy and surprises to include six properties that are individually or in combination with characterising customer delight. An expanded conceptualisation of how customer delight can be defined is proposed, in which customer delight is associated with various combinations of six properties. These six properties include the customer experiencing positive emotions, interacting with others, successful problem-solving, engaging the customer's senses, the timing of the events and the sense of control that characterises the customer's encounter (Mandal, 2020).

### **2.2.1 The Current Business Process Management Lifecycle**

Below is a figure that displays the Current Life Cycle of the existing business process management currently being used within the ISP environment and the Telkom Group.

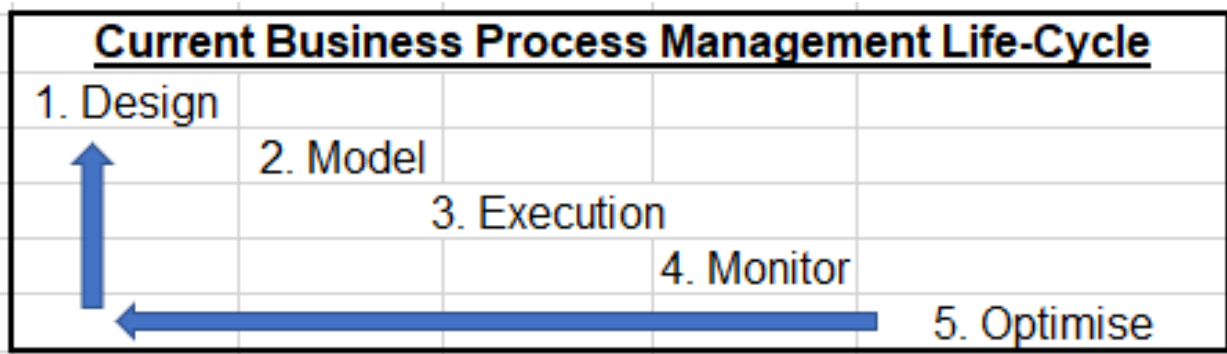


Figure 2.1: Existing Business Process Management Life Cycle

Source: FastNet Business Plan (2015/2016:68)

Shtub and Karni (2010) confirm Business Process Improvement (BPI) as a strategic planning methodology aimed at predicting the operations or employee skills that could be improved to encourage smoother procedures, more efficient workflow and overall business growth. This process can also be referred to as functional process improvement (Shtub & Karni, 2010). The customer experience is currently being affected by this process, which led to the researcher highlighting this process.

The BPI process is currently being used to manage the life cycle of existing business process management. What the researcher wants to stress in this regard is the importance of a step-by-step approach, as outlined below. This approach focuses mainly on the next step, for example, monitoring the new product after it was installed (executed). The total customer experience is something that is not being tracked proactively in keeping with the process management life cycle. Another process that is currently being used in the organisation is that of the RACI-principle approach to project execution. The RACI principle allows one to confirm in advance which person will be responsible, accountable, consulted and informed by means of a systematic process throughout the project lifecycle (Meredith & Mantel, 2011).

Smith (2005) indicates that a RACI chart should be used to recommend the roles and responsibilities within the project lifecycle of all the stakeholders. One of the main reasons for this is to make sure that there is always someone accountable and responsible per action item, with the main aim being to not have any role confusion. Smith (2005) confirms that there are several symptoms of role confusion, and refers to the 12 points listed below:

1. Concern over who makes decisions
2. Blaming others for not getting the job done
3. Out of balance workloads
4. Lack of action because of ineffective communication
5. Questions over who does what
6. A “we-they” attitude
7. A “not sure, so take no action” attitude
8. Idle time
9. Creation of and attention to non-essential work to fill time
10. A reactive work environment

11. Poor morale
12. Multiple “stops” needed to find an answer to a question.

All these symptoms of role confusion are relevant within the ICT and ISP environment. On top of this, the researcher is not entirely convinced that the RACI approach is still the most effective approach when it comes to the execution phase of these future products and being customer centric as this is more a silo approach.

Another challenge that is being experienced is that of operational readiness. There seems to be no clear guidelines or checklist regarding the success criteria for operational readiness. Kunz, Prasad, Samdanis, Husain and Song (2015) highlight this in “Are You Being Realistic about the Challenges of IoT?” by stating that the road to success is not guaranteed and that innovative product ideas are simply not enough. It is crucial for organisations and business units to fully understand the potential challenges that these future products, like IoT products, may cause before embarking on a product deployment cycle and strategy (Kunz et al., 2015). Based on research by Stackowiak, Licht, Mantha and Nagode (2015), Gong (2016) and Alberti, dos Reis, Righi and Chang (2016,) it is clear that there are currently five common objectives for obtaining success as regards future operational readiness with IoT type products. These are as follows:

The quality of the service, which refers to the execution and fulfilment of the service: Was everything working as expected upon installation? Was the speed with which it was installed satisfactory? Did the installation process take as long as planned and what lessons were learned? (Alberti et al., 2016).

Dependability concerns the fulfilment phase of the new product’s installations, affecting other areas, was there any downtime, et cetera. This includes an aspect like flexibility, that raises questions like the following: Was this a seamless experience for the customer or did the fulfilment process affect his day-to-day work? Were the entire fulfilment process completed within budget as planned or did any additional, unplanned costs occur? The researcher can relate to all these objectives listed as areas of concern, as the success criteria for them are still unknown or not yet defined.

It was mentioned in Chapter One how the understanding and approach within BCX FastNet is more reactive than proactive. Another concern of the researcher is the success criteria or benchmark relating to managing customer expectations. The researcher thinks that customers are becoming more insistent on being informed sooner of factors that will have an impact on them or influence them. Also, customers and people in general, are getting more technologically advanced, thereby increasing their ability and visibility in managing their suppliers or vendors. In a Cisco document labelled “at a glance”, it was revealed that their secret to success was making it easy to innovate and get things done. This led to a boost in productivity resulting from a continuous insight into changing conditions.

The researcher wants to focus the attention on a couple of these productivity and operational enhancements to show how these types of products can affect the rest of the organisation or environment. These enhancements are expected to improve the speed of time-to-market and also to improve the supply chain efficiency and availability. Other areas are based on efforts to boost organisational flexibility as well as to optimise asset utilisation.

What is expected from these types of products is that an organisation can implement predictive maintenance, improve product development by replacing outdated equipment, integrating controls, and regulating elements as well as monetisation.

### 2.2.2 Existing Value Streams, and Business Management Models

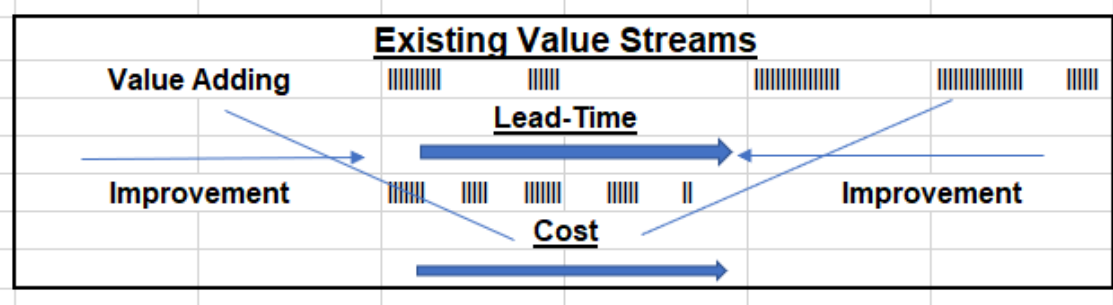


Figure: 2.2 Existing Value Streams  
Source: FastNet Business Plan (2015/2016 24)

The existing value streams as highlighted above give prominence to the importance of visibility throughout the product’s life cycle, especially when it comes to managing the customers’ expectations as well as the cost of the project or solution. In a success story by Syntel, two points that were emphasised were the needs to increase IT architecture flexibility and visibility, as well as to relook the revamping of CRM (Customer Relationship Manager) and billing competences to help reduce risk to achieving operational excellence within IoT.

The researcher will use IoT as an example for simplicity purposes as there are various other products, services and solutions types which can be mentioned or used as examples of future products. For the moment it will suffice to mention that (Alberti et al., 2016) define the IoT as a method for ordinary things to connect to the Internet with its own sets of fulfilment, project execution and support challenges and factors. These ordinary things are, for example, temperature and water censoring that allows the customer real-time visibility in the form of a dashboard or report. An alternative way to define IoT products is the provisioning of a network constituted by uniquely identifiable commodity objects or devices equipped with some sensing system which is expected to create a real-time view or dashboard of the specific commodity (Sharma, Chang, Tim, Wong, & Gadia, 2016)

Although the concepts and elements that constitute IoT products will be further explored, the challenges brought about by IoT and CSS-related products in the context of the study were discussed in Chapter one. The challenges, especially operational challenges that have been experienced by the researcher over the last five years, are mainly to do with customers’ needs, environment and expectations, all being predominantly unique. Furthermore, Grayson and Jane (2017) specify that operational business units struggle with the execution, fulfilment and the support of new products, solutions and services, especially (Preece et al., 2016) with ICT, ISP and IoT-related products and services. This scenario or solution is currently known as Customer Specific Solutions (CSS). More detail will be given later in the dissertation regarding the classification and definition of CSS products.



Brady, Davies and Gann (2005) interestingly already confirmed in 2005 that future products or services offered will be treated firstly as a CSS when it comes to the execution, fulfilment and support process before it is sold as an “off-the-shelf” solution. The main reason for this is because of the onsite complexity of exactly what is being sold, as well as what the customer wants to use it for or get from it. Both these scenarios affect how the customer experience affects the service, which influenced defining the aim of the research.

Their results suggested that when partnerships grow closer, the willingness to share template-based information increases and consequently also the willingness to proactively interact. Oks, Fritzsche and Lehmann (2016) postulate that the digitisation of society is changing expectations of customers and actively changing various aspects of the business.

This is spotlighted as a gap between the existing theory and what was described concerning the research problem in Chapter One. The five areas identified by Leimeister (2014) and listed below refer to this gap:

- Digitisation of products and service
- Context-sensitive value generation
- Consumerisation of organisational IT
- Digitisation of work
- Digitisation of business models.

Another model discussed in the literature that is currently being used is that of the existing business process improvement model. The flow of the process is illustrated below:

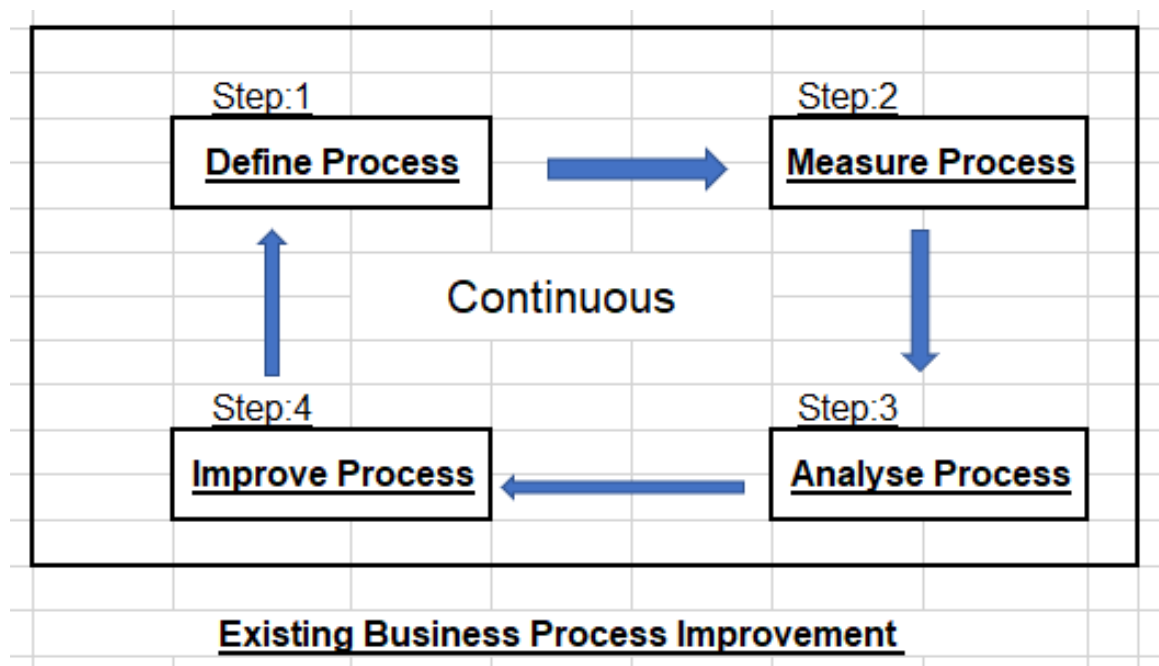


Figure: 2.3 Existing Business Process Improvement Model  
 Source: FastNet Business Plan (2015/2016:20)

The abovementioned improvement process is currently being used by the researcher's organisation, that is operating within the network or technology environment. The reason why the researcher raised this is because of the step-by-step approach that it follows in practice. This also focuses on a gap between the existing theory and what was described in terms of the research problem in Chapter One.

Bharadwaj, El Sawy, Pavlou and Venkatraman (2013), propose that rather than enabling business strategy, IT strategy should be shaping business strategy. Digital business strategy is defined as the organisation's strategy created and executed, using available digital elements to create maximum differentiation for the business (Bharadwaj et al., 2013). Aron, Waller and Weldon (2014) define the three key components of this leadership strategy for the successful digitalisation of business as being people leadership, value leadership, and technology and information leadership.

What is a concern to the researcher is that he sees a gap between these leadership strategies and the customer experience at the end of the day. The expectations and processes for future CSSs and IoT-related products are expected to be different (Mineraud, Mazhelis, Su & Tarkoma, 2016). The Internet of Things (IoT) is a novel paradigm that connects the pervasive presence around us of a variety of things or objects to the Internet by using wireless/wired technologies to reach desired goals (Alberti et al., 2016).

Since the concept of the IoT was introduced in 2005, we have seen the deployment of a new generation of networked smart objects with communication, sensory and action capabilities for numerous applications, mainly in global supply chain management, environment monitoring and other non-stress environments (Zorzi, Gluhak, Lange & Bassi, 2010). As mentioned in Chapter One, there is the expectation regarding future environments that every product and solution will differ and be treated primarily as a Customer Specific Solution (CSS). This means every solution or product should have its unique processes and systems.

In short, the expectation of the researcher is to find or identify a method that enables multiple different solutions. This also alludes to the gap between the existing theory and the research problem described in Chapter One. Compare the current process with how Point of Sale (POS) and Wireless Connectivity Services (WCS) used to operate, where it was more a case of doing the same thing 10 000 times – a cookie-cutter approach. Seeger (2006) confirms that operational effectiveness and cost-efficiency have always pointed towards a cookie-cutter approach as being the preferred approach when it comes to fulfilment and execution.

The experience over the last eight years has led the researcher to believe that a middle way was needed, not only between the old approach and the new approach to be as effective and accurate as possible in the fulfilment and execution process, but also to be as cost-effective and as practical as possible. This further points to a gap between the existing theory and the research problem depicted in Chapter One. Another area of concern is the opportunity evaluation processes that are currently being followed. This process currently highlights the existing framework within BCX FastNet as to when and how an opportunity is being evaluated.

As mentioned before, the step-by-step approach currently being followed has been a concern for the researcher and he would like to stress that he is not convinced that this approach is the most relevant

to delight future customers from an operational point of view. Refer to Figure 2.4 below to understand how the opportunity process is currently evaluated, starting from the left and working toward the right side.

<b>Opportunity Evaluation Process</b>					
<b>Sales &amp; Clients</b>	<b>Sales &amp; IoT</b>	<b>Sales, Client &amp; IoT</b>	<b>IoT/Commercial</b>	<b>Sales, Client &amp; IoT</b>	<b>Commercial</b>
→	→	→	→	→	→
<i>Initiate Client Relationship</i>	<i>Early Technical (Exploratory Involvement)</i>	<i>Assist Client in Scoping his problem</i>	<i>Business &amp; Technical Viability</i>	<i>Optional Capability Demonstration</i>	<i>Proposed Generation</i>
FastNet/BCX seen as Technology (IoT) Partner	Structured Feedback	Optimise client touch point	IoT Solution	Design Rapid Prototype if required	CRD as reference
Formulate Deal Qualification	Initial Screening/ approval	Expectation Management	Brainstorming	Demonstrate to Client	
		Define MVP	Business Screening	Customer buy in as output	
		Revisit Budget/Timeframes	Business Case doc		
		Deliverables	CRD cover page as output		
→	→	→	→	→	→

Figure 2.4: Opportunity Evaluation Process  
 Source: FastNet Business Plan (2015/2016:38)

In the experience of the researcher, the time and approval structures and processes that need to be followed are too long, which leads to opportunities being missed. This gave prominence to one of the interview questions that relate to the operational success criteria to take advantage of the window of opportunity when it presents itself.

Further existing literature pointed the researcher towards how to become or remain a Market Leader. To become a market leader, the current focus areas of BCX FastNet are broken into four categories, namely product leadership, differentiated service, organisational effectiveness through great leadership, and customer relationship excellence.

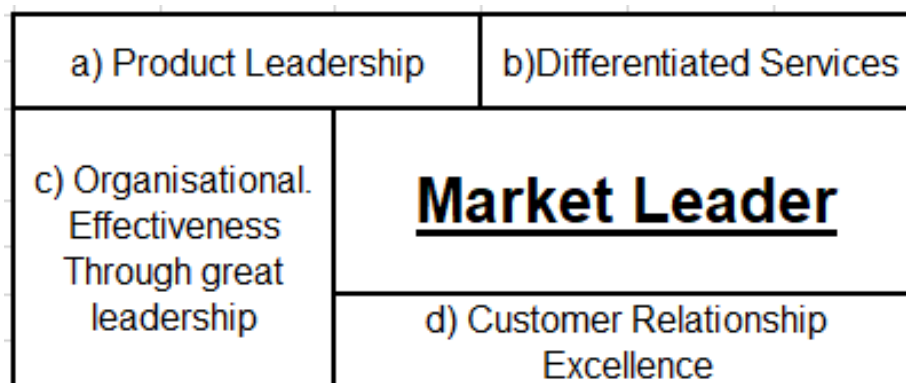


Figure 2.5: Current Approach to Market Leadership  
 Source: FastNet Business Plan (2015/2016:79)

The researcher is not convinced that these four focus areas will be enough or 100% relevant to remain a market leader in the future. The gap that the researcher wants to highlight is that the current success criteria to remain the market leader and expectations to delight future customers do not align.

The last existing literature or model to be discussed refers to churn and how it is currently being handled. The churn rate is the percentage of subscribers to a service who discontinue their subscriptions to the service within a given period (Lu et al., 2014). For a company to expand its clientele, its growth rate as measured by the number of new customers must exceed its churn rate. There are several reasons for churn increasing. Lu *et al.* (2014) confirm that with the rapid growth of digital systems and associated information technologies, there is an emerging trend in the global economy to build digital customer relationship management (CRM) systems.



Figure 2.6: Customer Churn

The reason this is relevant for this research is because the researcher is not convinced that enough is done to maintain and grow existing customers and that opportunities to grow and upsell existing customers are missed because of this. All these current processes, models and strategies called attention to will be tested and evaluated with current experts to validate its relevance and accuracy, together with what deliverables and service characteristics will be non-negotiables for future customers.

### 2.2.3 Sustainable competitive advantage

Seamless IT-business integration enables superior performance and provides value creation opportunities for an enterprise to achieve sustainable competitive advantage. Yet, creating IT-business alignment remains a challenge. Some users consider the existing IT-business alignment methodologies too complicated for practical implementation. (Puspitasari, 2020).

Puspitasari (2020) confirms that a simplified and practical framework, consisting of three elements, formulate a comprehensive IT-based strategy. These three elements are value drivers of IT implementation, competitive factors and an IT competitive strategy. The observational evaluation with the experts concluded that the proposed framework would be helpful for the targeted users. The framework application in a company also demonstrates the advantage and the usefulness of the proposed framework.

Advantages of Big Data Analytics represents a competitive advantage for businesses. Business decisions by analysing large volumes of data give them a different and added source for gaining a competitive advantage within the market or sector (Ali & Novikov, 2020.).

## 2.2 Change Management within the ISP and ICT Environment

The secondary question relating to change management is what the organisational characteristics are that would detect and predict effective change management within the ICT and ISP environment. Within the telecommunication industry, there is a constant need to implement changes to enable BCX FastNet to thrive within an ever-changing ecosystem. Whether the catalyst is an opportunity in the market, outdated technology, changing customer expectations, or the need for cost reduction, the logical process is the same.

### 2.3.1 Existing Change Model Process

First, it is necessary to understand what needs to be achieved, then the appropriate solution model and technology must be identified to address the problem area. Finally, the solution must be incorporated into the BCX FastNet operational mode, that is, the organisation needs to adapt to new business processes, new tools, new skills, and new mindsets.

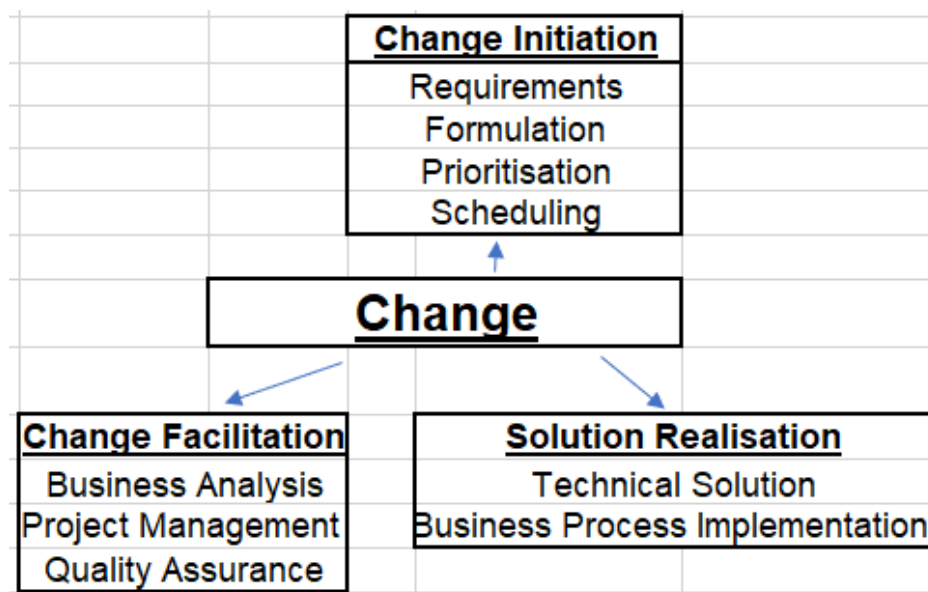


Figure 2.7: Change Model

Source: FastNet Business Plan (2015/2016:49)

The current view for BCX FastNet is that all these areas function separately and not as a unit. This leads to gaps where certain areas or departments within the change management process have a different understanding and insight into what has happened and what still needs to be achieved. This raises the problem that, if one part is not functioning in alignment with the rest, the performance and output of the machine are in jeopardy. Business organisations and the Information Systems team are expected to be collaborating partners to change the machine that is BCX FastNet.

The expectation to execute or master change management was to create awareness across the organisation that all functions are critical to the successful implementation of change. The expectation by the researcher's team has been that functional and departmental involvement will only vary depending on the complexity and size of the change. This led to gaps within the organisation which the researcher will focus on in his research questions.

Another approach by BCX FastNet over the last couple of years was to allow other business units and third parties to handle change management and important focus areas. This was done to improve the speed and quality with which the right solutions could be implemented. The ultimate priority by BCX FastNet was to balance the need to enable rapid solution implementation, with the imperative of maintaining and evolving a healthy core business (Parrot & Meyers, 2015).

This, however, did not realise, as factors like the mindset, understanding, skills level and attitude of the staff had a bigger impact than expected on the result. The researcher thinks that, in hindsight, BCX FastNet should have subcontracted part of the work more effectively rather than doing all of the work itself. This gap was formulated as a question posed to the experts for discussion later in the research process.

The reason why most of the work was kept in-house was to enable the existing teams to grow and expand their knowledge as they understood the vision and goals of the organisation. This is where the researcher experienced the risk of not getting the right balance between permanent employees versus contractors. This issue of balance was also formulated as a question posed to the experts at a later stage in the research.

### **2.3.2 The VUCA Impact on Change Management**

Another cause that impacted change management was the VUCA world. Horney, Passmore and O'Shea, (2010) indicate that the VUCA world faces four main challenges. The first one being volatility, as a brutal increase in four dimensions of the changes that we face today: type, speed, volume, and scale. The second one concerns uncertainty because of volatility, as we are unable to predict future events. The third challenge is complexity due to widespread confusion, with no clear connection between cause and effect, affecting all organisations nowadays. And lastly, ambiguity, as there is a lack of precision, with the existence of multiple meanings within the conditions surrounding us.

What was pointed out by Horney *et al.* (2010) while working with many outstanding leaders with extraordinary competencies, are the following aspects that were extremely relevant for the researcher, especially within the ICT and ISP environment: The first stated that staff are being overwhelmed and worried about not living up to their responsibilities. The second mentioned that

staff are bombarded with emails, meetings, and expectations that are almost impossible to meet. Raised last is that staff are experiencing increasing demand from multiple directions, with challenges that do not stop growing in scope.

Horney *et al.* (2010) believe VUCA is the biggest challenge that humans have ever faced. The VUCA concept seems to have been first introduced in the early 90s by the US Army War College to refer to the multilateral world that occurred after the end of the Cold War and was characterised as being more Volatile, Uncertain, Complex and Ambiguous than ever before (Horney *et al.*, 2010).

In a business context, the VUCA concept took off after the global financial crisis of 2008 and 2009. Since then, it has featured prominently in the development of leadership skills in various organisations (Horney *et al.*, 2010). Horney *et al.* (2010) argue that our brain loves to categorise and learn from the past to secure our future. This has worked well for thousands of years. Without this ability to predict the future based on past trends and to identify and validate risks, we would have disappeared as a species. Horney *et al.* (2010) go further by saying that this complex internal evolutionary system has done an incredible job of protecting us and allowing us to prosper for millennia, but that right now it is beginning to fail and limit us.

The VUCA environment means that we must focus on what is possible (because anything can happen) rather than on what is likely to occur (which is determined by what happened before) (Horney *et al.*, 2010). Horney *et al.* (2010) further indicate that four habits can help human beings to evolve and improve their ability to deal with higher levels of complexity, and which are easy to implement. These four habits include, firstly, to ask different types of questions, secondly to adopt multiple perspectives, thirdly to develop a systemic vision and lastly to look at the whole picture and then take a step back to see what is possible. Horney *et al.* (2010) also stress that this challenge is so critical that our survival depends on it. He believes the current strategy should be to learn and not only to try and survive but to thrive in this environment. He concludes by stating that we might as well enjoy it while changing our mindset. That is what leadership development and coaching are all about, according to Horney *et al.* (2010).

FastNet BCX has, with some success, over the last couple of years planned and executed an agile approach from a project point of view to overcome these VUCA elements. Cracks or gaps did, however, appear. There are two different methods and or approaches from a project viewpoint for all new future products that can be used (Stackowiak *et al.*, 2015). One is a waterfall approach and the other is an agile incremental approach.

The waterfall approach is when various units of the business take matters into their own hands by developing and deploying to independent markets to solve most immediate problems (Stober & Hansmann, 2010). The agile method aims at providing a new product or service development in a highly flexible and interactive manner. The agile method speaks to managing the design, building activities of engineering and information technology (Stober & Hansmann, 2010). Finding the best practice is one of the questions that the researcher investigated later in the research.

The approach that was used to manage change management was the change curve, as illustrated below. The change curve was used as a benchmark to see where in the process FastNet BCX was, from a staff perspective.

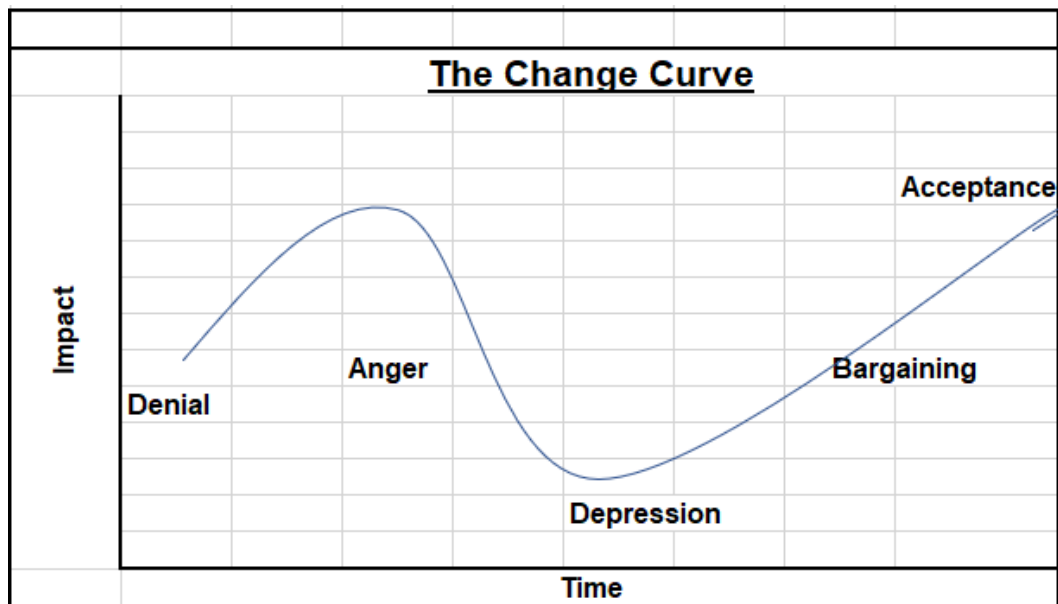


Figure 2.8: The Change Curve (FastNet 2016)  
Source: FastNet Business Plan (2015/2016:50)

One of the main concerns and stumbling blocks that has been experienced by the researcher over the last ten years with the change management process is the time that it takes. The change curve has always been used in certain sectors as a benchmark to list where in the process the company thinks it is.

The curve highlights, firstly, that there is a perception amongst the staff that there is no need for change. This indicates that the staff believes that whatever they have been doing and the way they have been doing it will be sufficient going forward. The next stage refers to the staff being angry or unhappy that they need to do things differently from how they used to operate and function in the past. These perceptions and feelings could lead to uncertainty and vulnerability, something new that could lead to a type of depression. Only then, at the next stage, do the staff members normally begin to see and understand the reason for the change and try to participate and be part of the process going forward, that would ultimately lead to acceptance. This process does affect the customer experience as well.

The researcher believes organisations do not always have the time to go through the change management stages and still be able to capitalise on the window of opportunity when an opportunity presents itself. What this means is that by the time your team has gone through the change curve process, there might not be many opportunities for the team left as the window of opportunity has passed. Finding the best practice is one of the issues that the researcher investigated later in the research process .



The last point that the researcher wanted to highlight is that of the approach to change management. Getting the correct buy-in from all the stakeholders from the start was perceived to be very important (Legris & Collette, 2006). The graph below reveals the steps that were expected to be followed over the last couple of years to implement the management change.

This graph below highlights the role of strategy, culture, leadership and performance in the change management process. The experience of this process over the last couple of years in FastNet BCX was that it was a very time-consuming and extended process.

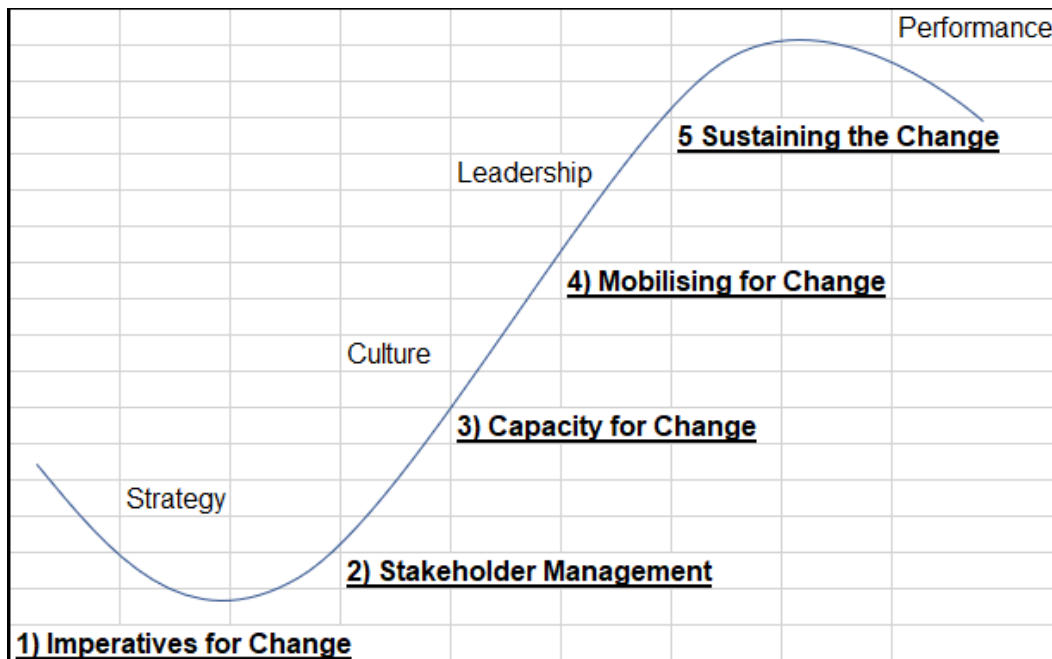


Figure 2.9: Change Management Process  
 Source: FastNet Business Plan (2015/2016:73)

The best approach or best practice going forward for handling change management within the ITC or ISP environment is explored further in Chapter Three.

### 2.2.1 Culture of the Organisation and its Role in the ISP and ICT Environment

The culture of the organisation and the successful implementation of the change management process go hand in hand, according to the researcher. Evaluating the difference in the way a traditional business and a web based business regard information, showed that the way the organisation views information is a key differentiator in a successful implementation process (Porter & Kramer, 2011).

Traditional business typically sees information as a manner to optimise and protect the assets that the company owns and uses it to generate business value and ultimately revenue (Porter & Kramer, 2011). The researcher thinks that web companies put information central to the organisation thus enabling start-ups to alter traditional businesses with more digital, innovative and technological means by gaining market advantage.

Considering the above, two components have come forward as key for the researcher, namely people and information. Considering that traditional businesses often do not have the fully integrated solutions of ICT or ISP companies, the information flow between the real world and systems is informed by people and the attitude towards data.

This leads the researcher to the conclusion that people, together with the associated culture, are one of the most important elements for success for companies seeking to make the move to a digital business strategy, and to be successful and relevant within the ICT and ISP environment in the future. Brewer (2013) identified the importance of people and the necessary supporting infrastructure as a strategic leadership challenge. The context here was to develop creative digital clusters in the UK, but it is also applicable to companies looking to create innovation and excellence within the business.

### 2.4.1 Current Performance Management Models

Driving performance within the team to achieve growth is also part of the current strategy in FastNet BCX. This applies to the culture of the team and is about working towards the best fit for the organisation to get the best performance and output. Several actions have been listed yearly in the FastNet BCX business plan in hope to get the best culture fit (Parrot & Meyers, 2015). These include the following:

Learnership programmes to be put in place to upskill and grow junior team members as well as shadow match programme to be used to ensure behaviour and relevant skills are developed. Another point that was mentioned was a compulsory onboarding programme to be developed and shared with all divisions to ensure culture fit and alignment of understanding the company strategy. The last two points highlighted were those of key leaders are placed on relevant courses and are educated for the next generation leadership needed as well as performance enablement has been implemented (Driven by the key performance indicators (KPIs)—see figure below).

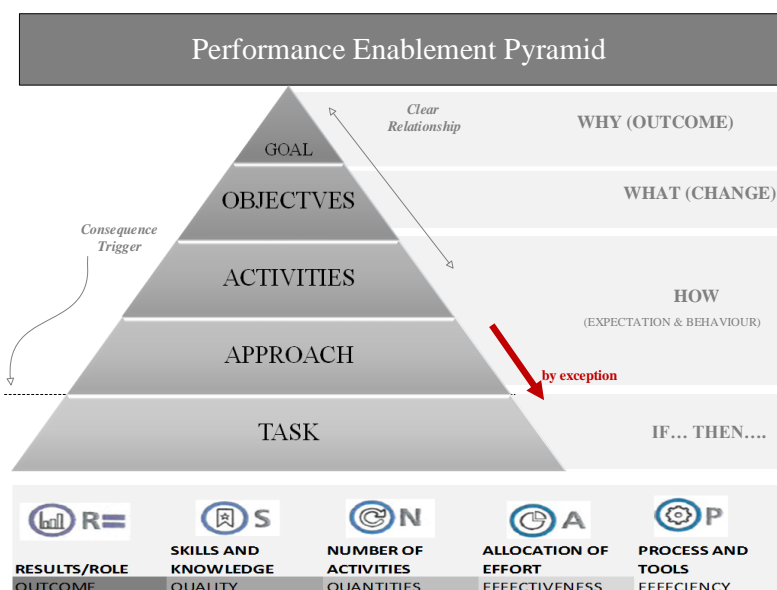


Figure 2.10: Performance Enablement Pyramid  
Source: FastNet Business Plan (2015/2016:68)

Although these actions were listed yearly on the business plan, the practical implementation and prioritisation of these points remained a concern and has led to gaps. One of the gaps referred to is the detail that is missing in the Performance Enablement Pyramid, which led to difficulty in separating the performing staff members from the non-performing staff members. Finding the latest best practice to get the correct culture fit is one of the issues that the researcher investigated later in the research.

#### **2.4.2 Historical Surveys and Existing Conceptual Model**

In 2016 the researcher surveyed the culture of the operational team and measured the variables listed below on the engagement of the team within the ICT and ISP environment. The independent variables that were investigated were, in the first instance, the environment created by management relating to a team member's enjoyment in working for the company and establishing if the team member would consider staying and recommend the company to friends and family. Secondly, the function or job fulfilled by the individual was assessed, exploring whether the individual felt that the workload was fair, whether enough information was available about objectives as well as day to day deliverables, while the team functioned well as a whole. Thirdly, management's willingness to share information and the tools available to facilitate and improve the sharing of information were considered, and lastly the individual as part of the team, the company and the assessment of self within the environment relating to ownership and value-added were assessed.

The internal study was conducted in the BCX FastNet Operations team in 2016. The survey consisted of 58 questions that each staff member in the team needed to rate between 1 and 5, with 5 being strong agreement. The reason why the researcher wants to highlight this is because it gave him a preconceived idea of what role culture has within an organisation. None of this information was used for this specific research; it is mentioned because the 2016 survey highlighted certain areas in the perceptions of the management teams that informed the researcher in his choice of a relevant field for this current study.

The survey summary indicated that the expectation with BCX FastNet was that if these variables were recreated within the company, it should lead to a culture change in the workforce resulting in an associated change of approach. This change would manifest as improved alignment to the organisation's strategy.

Depending on the quality of the survey results, it may be possible to make further assumptions about the most important factors and what would yield the biggest immediate benefit. The internal study of 2016 expected to validate the independent variables as important in creating and improving the culture of the operational teams. The results were tallied per team over five teams so that comparisons could be made between the results from the research instruments and the managers' and technology teams' impression of the relevant team's input. This comparison was done by grouping all the similar answers together, which is displayed in a specific colour in the bar graph below. As a result of this culture survey, there was an improvement in the quantity and quality of input provided to the digitalisation strategy of the company.

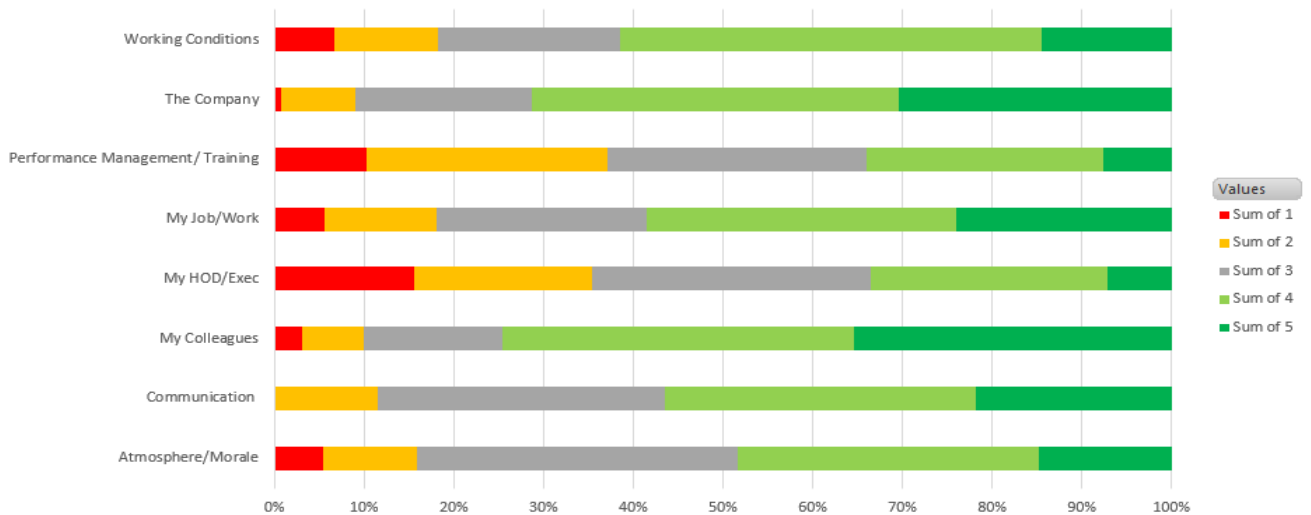


Figure 2.11: FastNet staff feedback 2016

The survey led the researcher to believe, based on the grouping, that the reason why existing and settled staff members were more reluctant to expand their knowledge and or scope of work could be ascribed the fear of failure and operating outside their comfort zones. Another observation that stood out was the request from management to align all the staff with the strategy of the company, but no clear plan or suggestion was given on how this should be achieved.

Liu (2017) describes the comfort zone as a place, situation, or level where someone feels confident and comfortable. High unemployment, skills shortages and work security are projected to be the main drivers that lead existing staff to this approach. The points and causes listed in the diagram below were very relevant to the researcher, as it was experienced daily.

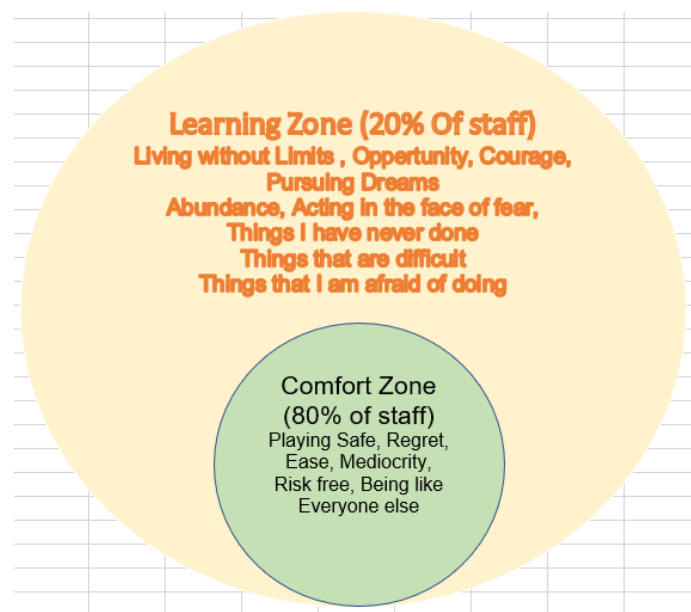


Figure 2.12: The Comfort Zone

Source: FastNet Business Plan (2015/2016: 80)

Current literature or knowledge shows that expanding the comfort zone of the existing operations business units, in some way or form, comes across as being a big challenge that needs to be overcome. It also guided the researcher to accept that there are various ways to explore and improve the comfort zone of existing operations teams so that they will have what is required to turn into front-runners in the future.

The current methods and main value drivers, as highlighted by Stackowiak *et al.* (2015) to improve this comfort zone, is to broaden and deepen the technical skills pool and focus of the employees. Stackowiak *et al.* (2015) indicate that other preferred methods to overcome the limitations of a small comfort zone is to get staff to concentrate on core competencies by creating a safe, positive and encouraging working environment for the existing team to operate in and explore. By doing this will allow the company to successfully align and implement the SOP, structures and processes to cater for future products and services.

These methods and aims will be investigated in depth in Chapter Three. Also, the researcher's current expectation and understanding are that the operational environment for future products and services requires a more knowledgeable, proactive and flexible approach compared to the existing operational business units that are more reactive, system-driven and structured.

The current expectations, based on the researcher's experience and existing knowledge to date, is that for these types of "future" products and services, the customer experience and the ongoing benefit and interaction with customers are critical for future growth. It is also important to note that for future types of products, especially CSS type of products and services, the success of any particular business strategy depends on both the ability of operations to achieve excellence in the appropriate performance objectives and crucially on customers valuing the chosen competitive factors on which the business strategy is based (Anon., n.d.).

In general, most of the existing staff is well settled and content with their existing position and roles. The lack of ability and willingness to change is highlighted as the biggest concern, which expects to lead directly to the lack of flexibility, adaptability and productivity of the staff going forward. The researcher could not find any real credible literature on how to handle and convert and pursue problematic, non-performing staff or staff members who are resistant to change. This is a key area that needed to be assessed, therefore the questions regarding best practice and success stories within the ICT and ISP environment were validated during the interviews.

This aspect was important to the researcher because it raised the question as to the extent to which the organisation has to accommodate employees who continue to resist change or how much time and money it should spend on staff members who do not contribute anymore. The various ways and methods to handle these staff members should also be part of the discussion. Various actions can be taken regarding staff and affected role players. The researcher could not find relevant existing literature to validate the industry benchmark, as it is perceived to differ according to the management style and the organisation or industry environment. It is necessary here to indicate four factors that affect the approach to creating a climate for change that needed to be tested during the research in Chapter Three:

- 1) What is the appetite/loyalty of the organisation regarding the change process?
- 2) Do companies have the required time to spend on successfully implementing the change process?
- 3) How can the cost that will be spent per area, business unit or staff member be measured when flogging a dead horse and what should be the target?
- 4) What is the situation regarding contract employees versus permanent employees?

Based on the literature review, there should be a direct similarity between the contributions made by a team member and whether the team member displays key characteristics found in successful digital companies. The employees and their thinking and approach are driven by certain key variables (Salo & Karjaluo, 2007), listed below:

1. Team perception of the company as a place of work
2. Team perception of the function or job
3. Perception of knowledge management
4. Employee's impression of self.

The diagram below provides a graphical representation of what the proposed validations of the key elements are to create a culture for digitalisation in operational teams as well as the other drivers for digitalisation identified in the literature variables (Salo & Karjaluo, 2007).

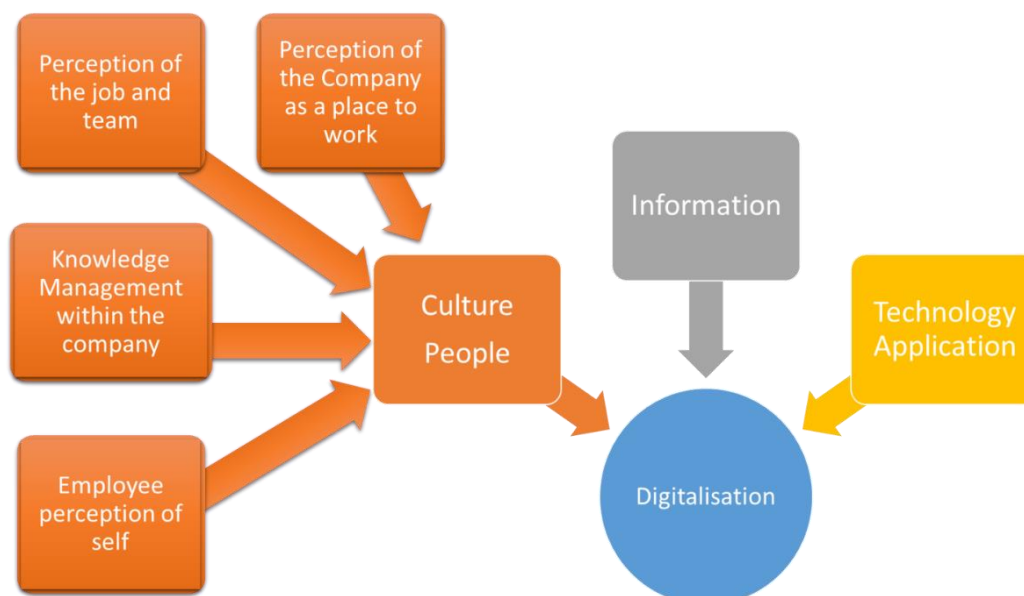


Figure 2.13: Conceptual Model (FastNet Business Plan: 2016/2017)

The success of this approach was difficult to measure as no clear success criteria were defined. These elements were tested in the research to validate their relevance in today's environment as well as in the expected future environment. The reason why this model was chosen was because of the focus on the word perception relating to measuring culture. The researcher thought that too much publicity was given to what the perception of staff was, rather than dealing with the non-performing staff members adequately. This assessment was tested during the research to assess if this view is valid.

The last source that the researcher wants to draw attention to is the challenges that are currently facing South Africa within the ICT and ISP environment. This research discussed below considered South Africa in general (Statistics, 2014). The reason why these aspects are regarded as challenges is that the researcher believes they, directly and indirectly, affect the staff's attitude to change due to the fear of the unknown and exposure.

The challenges that stood out for the researcher were broken down into two areas: The first area highlights past concerns and shortcomings. This includes the weak competition for goods and services, the poor skill profiles of a certain population of the country, the current post-school system not being designed to meet the skills development needs, as well as the performance of universities being uneven. The second area reflects on the current future outlook, with the shortcomings being: Further education and training (FET) that is too limited, with poor output, and not effective (65% of college students are unable to gain work experience). also included are ongoing problems with sectorial education and training authorities (SETAs), poor management, no proper monitoring and evaluation and, lastly, no accurate records of beneficiaries and impact

The information above gives prominence to the fact that internal as well as external difficulties and shortcomings are expected during the process of converting operations for IoT excellence. STATS SA (2014) also indicates that the possible reasons for these shortcomings and skills shortages could be due to the closure of teacher training colleges, Apartheid legacy, inappropriate merging of educational institutions, outcomes-based education, weak administration (e.g. failed delivery of schoolbooks) or firms not willing to invest in training of employees to list a few.

What the researcher learned from this information on skills in modern-day South Africa is that the education system is not adequately serving skills development and is in urgent need of reform. These gaps will be further investigated in Chapter Four.

### **2.3 Conclusion**

We are dealing with a world where change is ever bigger, where the future is less predictable, where choices increase exponentially, and the way we think about these options has unquestionably changed. Today, leaders must make decisions quicker, processing huge amounts of information, in an environment where everything is more interconnected than ever before.

One of the big problems appears to be that for many centuries, we have been raised in a context in where we believed that the world was predictable. Nowadays a different mindset is required, where the important thing is not to focus on what is probable, but what is possible.

Based on the literature review in comparison with the research problem, gaps have been identified and highlighted. The gaps that were identified through the literature was that the balance between the success criteria of the future operational environment, organisational culture and change management was not clear. Delighting the customers was used and interpreted in different context and areas. Different areas and departments would interpret this in different ways.

What can be done practically to delight the customer? The last gap that stood out for the researcher was the criteria relating to sustainable competitive advantages within the ISP and ICT environment, determining what would practically and realistically differentiate you from the competition.

These best practices relating to operational relevance, culture and change management were thoroughly investigated in the research to determine what best practice would be most effective in addressing and closing the gaps.



## CHAPTER 3

### Research Design and Methodology

#### 3.1 Introduction

This chapter outlines the design, methodology and steps that the researcher followed in Chapter Four to fill the gaps as highlighted in the literature review in the previous chapter. The research design and methodology, as described by Holden and Lynch (2004), should be determined by the researcher's philosophical stance and the social sciences phenomenon being investigated rather than being led by methodology. This chapter covers the research design and methodology, inclusive of sampling, population, establishing rigour during and after data collection, ethical considerations and data analysis.

Runeson and Höst (2009) define a research design as "a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings". Understanding the "lived experiences" marks phenomenology as a philosophy and as a method, and the procedure involves studying a small number of subjects through extensive and prolonged engagement to develop patterns and relationships of meaning (Creswell, 2013).

As indicated by the researcher, the research design will consist of phenomenological research, in which the researcher identifies the "essence" of human experiences concerning the phenomenon, as described by participants in a study. In this process, the researcher is expected to bracket or group previous experiences gained to understand those of the participants in the study. What this means is that the researcher needed to put his own experience aside and only focus on the feedback and responses provided by the participants.

Creswell (2013) refers to qualitative research as "a form of social enquiry that focuses on the way people interpret and make sense of their experience and the world in which they live". The researcher used a qualitative approach to explore the behaviour, perspectives, experiences and feelings of people and emphasise the understanding of these elements. This approach adopts a person-centred holistic and humanistic perspective to understand human lived experiences without focusing on the specific concepts (Roberts, 2013).

Complete objectivity is impossible and qualitative methodology is not completely precise, because human beings do not always act logically (Roberts, 2013). The researcher is highlighting this as he wants to take a clear stance, having a preconceived approach, which raises the question of objectivity. He expected to achieve objectivity by making sure that he interpreted and understood what the participants were saying or answering, as well as being as clear and direct when asking the questions to prevent any misinterpretation or grey areas. The rationale for using a qualitative approach in this research was to explore and describe the opinion of audiences that have had successes in working and operating in these future product environments.

## 3.2 Research Design

The research design was based on inductive theory and was tested using the qualitative research methodology approach, by developing knowledge by assessing variables and validating claims specifically through experimental interviews with the target population. The researcher did mention in Chapter One that all three the research problems would be investigated, which would allow the researcher to justify the success criteria characteristics for a sustainable competitive advantage within the ICT and ISP environment. This included the change management process as well as the required cultural fit.

Just as a refresher, the primary and secondary questions that assisted the researcher to achieve these objectives are the following: The primary question is what kind of framework will ensure the operational success criteria for a sustainable competitive advantage that will add value to customers within the ICT and ISP environments? The three secondary questions aligning with the primary question, are as follows: Firstly, what are the performance criteria for ongoing operational success within the ICT and ISP environment? Secondly, what organisational characteristics would detect and predict effective change management within the ICT and ISP environment? Lastly, what are the predicted elements required to establish the right culture fit within an organisation?

“The mode of inquiry informs the research design “and is in turn directly influenced by the ontology, the problem, the aim and objectives and the nature of the research questions (Maree & Van der Westhuizen, 2009). The design reflects the overall plan that is expected to be undertaken during the study. According to Cooper *et al.* (2003), the research approach is critical for the outcome of the research project. Cooper *et al.* (2003) argue that a qualitative approach will lead the researcher to understand and predict trends through analyses of the different elements required to convert successfully. This qualitative study used an inductive mode of enquiry because it used words to describe the findings. Data were mainly sourced through interviews with the selected participants. This were used to determine the person’s perspective and how he/she makes sense of the situation. This type of research is undertaken in order to understand things as the respondents (participants) perceive them.

Creswell (2013) further indicates the philosophical and key elements of four qualitative inquiry approaches regarding research design and methodology: These four approaches are Narrative, Phenomenology, Grounded and Ethnography theory. Phenomenology Theory is used to describe the meaning of a ‘lived’ experience of a person to understand more fully what has occurred (Creswell, 2013). This type of research is undertaken to understand things as they are perceived by the respondents. This research design requires fieldwork over an extended period, during which time detailed notes are made on the beliefs, rituals and traditions of the group involved (Saldaña, 2015). Phenomenology theory is therefore the theory that the researcher used . For this, the researcher commonly used interviews to determine the person’s perspective and how he or she makes sense of the situation.

Firstly, the researcher’s point of departure was that the general impression, history and understanding of these future types of IoT products and services are still relatively new and have only been around

in some way or form for the last decade (Yang, Yang & Plotick, 2013). Then secondly, the researcher expected that the best way to find answers and or recommendations for his research objectives was to target leaders that have been able to continue growing their organisations or business units during the last decade and have remained relevant within the market.

The main reason for this is that the researcher believed that not only was this a niche and limited audience that he would target, but he also understood that he would need to target a variety of them to gain the truth. Semi-structured interviews were used for conducting the qualitative research and to get the desired data as this would create the framework in which interviewees could elaborate and react. Each of these methods would be adapted to the research design and research method (e.g. mixed-method research, action method research).

**Table 3.1: Overview of the basic methods of data collection used by the researcher.**

	<b>Overall purpose</b>	<b>Advantages</b>	<b>Challenges</b>
Interviews	When you want to fully understand someone's impressions or experiences or learn more about their answers to questionnaires.	Get full range and depth of information. Develop a relationship with the interviewee and also being able to create a platform.	Can be flexible with the interviewee. Can take as much time as needed. Can be hard to analyse and compare. Can be costly. The interviewer can be biased towards interviewee's responses.
Document ation review	When you want an impression of how a programme operates without interrupting the programme; taken from a review of applications, finances, memos, minutes, etc.	Get comprehensive and historical information. Does not interrupt the programme or client's routine in the programme. Information already exists.	Often takes much time. Information may be incomplete. Need to be quite clear about what you are and what you want.

### **3.3 Research Methodology**

According to Gray (2004), the ontology of western civilization has primarily been influenced by the philosophy of Parmenides, a Greek philosopher who proposed Parmenidean ontology, which is a permanent and unchanging reality of being. This ontology of being resulted in the emergence of at least three epistemological positions, namely objectivism, constructivism and subjectivism. In addition, to qualitative research designs, there are two main types of design: They are an interactive mode and a non-interactive mode of enquiry.

With this research, the researcher employed an interactive mode of approach where the majority of the data, feedback or responses were received in a face to face environment. This allowed for an

individual's subjective views to be studied, but also for the researcher to stay impartial, as promoted by Gray (2004), as well as the researcher, who believes that individuals with similar biases react similarly to stimuli. It is, therefore, possible to view reality from the outside and make determinations on the impact of reality on individuals by applying these factors relevant to the target population.

The research design was a qualitative, exploratory study, using an inductive mode of enquiry because it used words to describe the findings. This approach is expected to be best suited to the structured and management background together with subjective analytical thinking ability. Exploratory type of research is usually conducted to have a better understanding of the existing problem but usually doesn't lead to a conclusive result. The goal of this approach is to understand human behaviour and the responses of individuals to stimuli.

### **3.3.1 Research population**

Pipino, Lee and Wang (2002), define a population as "the total number of units from which data can be collected", such as individuals, artefacts, events or organisations. Pipino *et al.* (2002) further define the eligibility criteria as "a list of characteristics that are required for the membership in the target population". The criteria for the population that the researcher has used for inclusion in this study were:

- Senior management and executives from predominantly English-speaking Western countries.
- Age between 35 and 55 years, from all races and genders.
- More than 15 years' experience in the Technological and Network environment.

The reasons for these criteria were, firstly, to ensure that the message is understood correctly and that there would be no miscommunication; secondly, to make sure that the relevant person is experienced enough and young enough to understand the modern-day ISP and ITC environment, including the latest technology and innovation trends.

### **3.3.2 Profile of participants**

The results of this study stem from the interviews. In total, twelve people were requested to be interviewed, and of the twelve people, seven agreed via email to be interviewed, thus giving a response rate of 58% as highlighted in Chapter Three. Initially, to gain background information about the respondents, the interviewees were asked about their demographics, numbers of years of service, as well as what each would consider to be their biggest success to date and why.

This was done to get background on the interviewees and provide a better context for the researcher for the rest of the interview. All the participants had more than 20 years' experience in senior management in the ISP and ICT environment from a senior level upwards and were deeply involved in decision-making in their organisations, which made all of them suitable candidates.

### 3.3.3 Sample and Sampling size

The sample was chosen from senior management and executives that were successful in some way or form in the technology and networking environment. There are two types of sampling design: the probability sampling design and the non-probability sampling design. The difference between non-probability and probability sampling is that non-probability sampling does not involve random selection, and probability sampling does (Creswell, 2013). The researcher used non-probability sampling as it was not possible to interview all the role players available due to constraints of time, cost and resources.

Sampling decisions evolve during the research process, and sampling cannot be planned before embarking on the study (Maxwell, 2008). Ongoing decisions about the direction of data collection are dependent on the development of categories (Maxwell, 2008). What this means is that some questions will follow or lead, based on the answer to the previous question. An advantage of purposive sampling is that it is used to adequately capture the heterogeneity of the population. The goal is to ensure that the conclusions requisitely represent the entire range of variation, rather than only the typical members or some subset of this range.

Another strength is that the sample can be purposefully selected to allow for the examination of cases that are critical for the theories that underpin the study, or that have subsequently been developed. The design of a research sample as described by Ritchie (2003) plays a critical role in determining if the study sufficiently investigates the objectives. The sample must be representative of the target population to allow for the possibility to generalise the findings that will assist and guide the researcher to predict what will be required to delight future customers.

Purposive sample sizes are determined by theoretical saturation, which is the point in data collection when new data no longer brings additional insights to the research questions (Marshall, Cardon, Poddar & Fontenot, 2013). Purposeful sampling is, therefore, most fruitful when the data review and analyses are done in conjunction with the data collection. To achieve this, a study will generate or collect the initial data using purposeful sampling. Pipino *et al.* (2002) assert that the sample size does not influence the importance or quality of the study and note that there are no guidelines in determining sample size in qualitative research. The researcher did, however, take into account all the timeline constraints as well as the quantity of the available experts when preparation started.

Qualitative researchers do not normally know the number of people participating in the research beforehand; the sample may change in size and type during research. Sampling goes on until saturation has been achieved, namely when no new information is generated (Carson, Gilmore, Perry & Gronhaug, 2001). In this study, the total number of senior management members and executives that were contacted was twelve, of which seven accepted the invitation. The researcher selected these participants based on their success as leaders and managers of companies in the network and technology environment in South Africa.

Sampling is the process of selecting several individuals for the research study in such a way that the individuals represent the larger group from which they were selected, e.g. a subset of a population that is used to represent the entire group as a whole (Ary, Jacobs, Irvine & Walker, 2018). The

population refers to all the people in the country (or the world) that would meet your research criteria. The sampling process of selecting units (e.g. people, organisations) from a population allows a researcher to generalise the research results back to the population from which the sample was chosen.

The researcher used non-probability sampling as it was not possible to interview all the role players available due to time, cost and resources. There are different types of sampling, such as probability and non-probability sampling. The research sampling methods that will be used will be towards specific respondents. Purposive sampling means that you select research subjects for a particular purpose (Green & Thorogood, 2018).

The reason why purposive sampling is used is that all respondents are expected to be experts, thus at no point in the sampling process would people who know nothing of the topic be used. A researcher would choose people based on their knowledge and expertise in terms of the research topic to participate in the study. If you are undertaking a study where your respondents are experts, for example, then there is no point in sampling people who know nothing of the topic. (Robson & McCartan, 2016). In this study people, based on their knowledge and expertise in terms of the research topic, were chosen to participate in the study. The aim was to get 9 to 12 leaders and experts in the field. The majority of these were expected to be either Chief Operating Officers (COO) or Chief Technical Officers (CTOs). Expectations were that the researcher was interested in getting the success criteria from these CTOs and COO within the ICT and ISP environment. The criteria for selecting these individuals were the following:

- CTO or COOs or senior managers from English-speaking Western countries
- CTO or COOs or senior managers between the ages of 40 and 55 years from all races and genders
- CTO or COOs or senior managers with more than 15 years' experience in the Technological and Network environment.

The reasons for the above criteria were the following: Firstly, that the researcher could relate to the people by understanding the relevant person when conducting the interview and analysing them, as well as knowing that the person has sufficient experience in this environment and secondly that the person was "young" and "old" enough to see and understand the generation gaps. By this is meant that the person is not trapped in old-school thinking on what has worked for him or her ten years ago.

### **3.3.4 Sampling process and procedure**

Barnes, Grove and Burns (2003) refer to sampling as a process of selecting a group of people, events or behaviour with which to conduct a study. The sampling process in this study aimed to select a portion of the industry experts that represent the relevant population. Sampling is closely connected to the generalisability of the findings.

The sampling of the participants was done as follows: Firstly, the possible participants were selected after the researcher had pre-selected participants according to the criteria listed. Then, secondly the research project was explained to the prospective participants who were on the shortlist and they were asked personally if they wanted to take part in the research. Lastly, the researcher selected the

potential participants for an interview discussion. In the event of a problem with convincing participants who met the criteria for selection for the study, each eligible participant was asked after the interview to refer colleagues or candidates who could add value to the relevant topic or would have a different opinion or approach.

### **3.4.1 Data collection**

There are two types of data sources, namely primary and secondary, according to Cooper *et al.* (2003). A few examples of data collection methods are as follows: by email, questionnaires, telephone, face-to-face or action groups.

According to Golafshani (2003), a research instrument is a tool used to collect data. An instrument is a tool designed to measure knowledge, attitude and skills. During this research, data was collected during one-on-one Interviews. Obtaining data from participants with different experience backgrounds prevented information bias and thus increased credibility regarding the information.

The structure or plan for the data analysis of the qualitative study were coding practices in analysing the data. Coding, according to Corbin and Strauss (2008), is used to assemble a comprehensive picture of the information obtained during the data collection process. There are different types of coding options and the one that the researcher used was axial coding. Corbin and Strauss (2008) describe axial coding as a crosscutting or linking of related concepts to each other as a technique and procedure for developing grounded theory. These concepts will then be grouped, based on the category that the concept relates to.

The data collection method used was conducting interviews. This is mainly due to the complexity of the study as well as the particular target market. Interviews were used to collect the data because the researcher wanted to fully understand impressions or experiences of the target person (market leaders) and learn more about their answers to get a full range and depth of information.

An interview is expected to provide the researcher with a structure to collect information from the specified audience. The researcher used both closed- and open-ended questions in the interview with the goal that he would be able to analyse the responses. Closed (or short) questions usually require short answers. Candidates can only respond 'yes' or 'no' to these types of questions. A common form implemented for closed or short questions is multiple-choice questions (Boeren, 2019). Open-ended questions, on the other hand, require a much more detailed response. The answers could come in the form of a list, a few sentences or something longer such as a speech, paragraph or essay (Boeren, 2019). These questions cannot be answered by a 'yes' or 'no' – they need an explanation. They are very useful in interviews (Boeren, 2019). By designing appropriate questions, one needs to gather a decent amount of data using a small number of questions (Koshy, Zhang, Naqvi, Liu & Mohiuddin, 2010). The researcher created the interview template based on these ideas and concepts. A number of these questions and feedback are expected to lead to other leads, best practises and ideas. The researcher did include and group some of the responses when two or three different questions were covered by one response.

Responses to the questions: The researcher aimed to start with questions about the background of the person in simple language which the respondents would understand and which would allow the researcher to form an understanding of where the respondents came from. Interviews are usually expected to give rich and informative data. The researcher planned on conducting the interviews on a one-on-one basis. The reason for this is because one does not want to stop the flow of the conversation. Interviews were recorded, allowing the researcher to listen to the conversation again, should he have missed something during the interview, or when transcribing the detailed interview.

There are two types of interview questions that can be used: structured and semi-structured (Anon., n.d.) With structured interviews, the researcher will have a set of pre-designed questions and will ask only these questions, in the order in which he has designed it (Gibb, 2019). With the semi-structured questions, the researcher prepares a set of questions but will use sub-questions to delve deeper into what the interviewee is saying. This is a much more flexible approach. This researcher expected to adopt a more semi-structured interview approach during the interview (Gibb, 2019).

The study commenced with the following participants: Twelve participants were approached with seven accepting the invitation. These seven consisted of the Managing Executive of Technical Solutions BCX (ME), the Sales Executive for Integr8, the Chief Executive Officer of Qkon (CEO), the Managing Executive of Nokia Southern Africa, Sales Executive for Middle East Africa of Dimension Data, Senior Manager: Customer Engagement for CEB Maintenance and Senior Manager: Customer Engagement for African Bank.

The researcher did include, in the form of participant eight, the feedback and recommendation from an internal focus group within BCX, where seven-line managers were present, and the discussion centred on culture and change. The researcher did pose his questions to the group as well to test the responses.

Some guidelines that this researcher had followed in respect of interviews was to choose a comfortable place for the interview to make sure the interviewee felt protected. He also made sure the interview was not too long, no longer than 50 minutes.

### **3.4.2 Interviews**

Interviews provide rich and informative data (Schultze & Avital, 2011). Further to this, Schultze and Avital (2011), confirm that in most cases interviews are done on a one-on-one basis and should be recorded to not stop the flow of the conversation. This would allow the researcher to listen to the conversation again in case he has missed something during the interview and wanted to transcribe it, the text being easier to analyse than a recording.

There are several advantages regarding interviews that were most appropriate for this research project. The first one being that Interviews allow for easy correction of speech: any misunderstanding or mistake can be rectified easily in an interview. Secondly, the interview method allows for more effective use of time. It allows the researcher to do his or her homework before selecting and interviewing the relevant applicant, thus, to be prepared as best as possible before each interview.



Lastly, Interviews are more cost-efficient. In a very short time, communication can be accomplished with the interviewee, as it is a very simple, prompt and low-cost method of communication.

There are two types of interviews: structured and semi-structured. In structured interviews, the researcher typically will have a set of pre-designed questions, and ask only these questions, in the designed order. For semi-structured interviews, a researcher also prepares a set of questions, but sub-questions can be used to delve deeper into what the interviewee is saying. This is a much more flexible approach, which the researcher has consequently taken with this research. The reason for this is because the researcher was expecting more opinions and views to come out of the original set of questions, that would lead to new questions and concerns that were not thought of or known about at the beginning of the research project.

Interviews are used when one wants to fully understand someone's impressions or experiences or learn more about their answers. It is expected to allow the researcher to get a full range and depth of information to develop a relationship with interviewee. Another positive characteristic of the semi-structured interview in particular is that the researcher can be more flexible with the interviewee, as one can spend more time on certain questions rather than being restricted by the predetermined structure without the point or question being properly covered. The interview technique used by the researcher was to maintain eye contact with the participants as well as focusing on being structured to allow guidance. The essential planning as done beforehand.

At the end of each interview, the respondent is asked whom he suggests the researcher should include in the study. This is known as Snowballing sampling. In snowball sampling, initial seed respondents recruit additional respondents from their network of friends. The recruiting process repeats iteratively, thereby forming long referral chains. (Schonlau, 2012). The researcher made use of snowball sampling, because of the relationship and similarities between the respective leaders within the ICT and ISP environment, being a small environment with various companies working together or interacting through joint ventures and business collaborations, making referral logical.

### **3.4.3 Response set bias**

Personal characteristics of participants may influence their responses to questions, resulting in the phenomenon of social desirability of response, extreme forms of response and acquiescence. By means of the interview technique, the signed consent form, explaining the purpose of the research to the participants, assuring them of confidentiality, the above possibilities were reduced. The researcher was the main conductor of the study in the participants' natural and familiar environment. Sometimes temporary states of participants, such as anxiety and fatigue, can influence their response. To limit this, the interviews were scheduled and planned at least two weeks ahead to allow both parties to be well prepared and in a good space

The researcher practised bracketing as well as reflexivity to overcome any response set bias. The researcher also went back to the relevant participants after each focal point to verify and clarify their responses if unclear or if there was room for interpretation.

Administration variations, such as mixing of notes or running out of power, can cause problems during data collection. In this study, the researcher practised how to use the recording function on his phone and also had a spare phone for backup, with both phones having enough memory space and battery life. The phone was placed on flight mode to prevent any incoming calls taking place during the interview.

#### **3.4.4 Research instrument**

In this study, the researcher was the primary data collection instrument because the data gleaned from participants were words spoken in the context of the research problem (Holloway & Wheeler, 2002). To ensure the credibility of the data collected, the researcher laid aside his preconceived ideas by writing down his opinion on the research problem so that he made sure that it would be taken into consideration when the findings were established. This allowed flexibility in the collection of data. The participants were not guided by the researcher's prior knowledge of the phenomenon, but by their own experience.

### **3.5 Data Analysis**

Data analysis entails organising, providing structure and eliciting meaning from data. Analysis of qualitative data is an active and interactive process (Smith & Smith, 2018). Data analysis commenced after all the interviews had been conducted. It was done on a point-by-point basis, which means that the researcher analysed all the responses and answers on one question from all seven participants before moving on to the next point or question. This allowed the researcher to keep focus and concentrate on each specific focal point.

The researcher used reflexivity and perceiving to lay aside his preconceptions regarding the phenomenon under investigation. This assisted him in ensuring that he understood and interpreted the responses correctly and accurately. Afflerbach (2020) identified three intellectual processes that play a role during data analysis which the researcher implemented in the research. The three intellectual processes are the following:

1. **Comprehending:** The researcher wanted to learn about what is going on. When comprehension was achieved, the researcher was able to prepare a detailed description of the phenomenon under study. When saturation was achieved on the topic the researcher moved on to the next question.
2. **Synthesising:** This involves the researcher sifting data and putting the pieces together. This enabled the researcher to make sense of what is typical regarding the phenomenon. The researcher did make general statements regarding the phenomenon and participants.
3. **Theorising:** This is the systematic sorting out of data. Alternative explanations of the phenomenon were developed by the researcher to determine their correlation with the data.

These processes that were used to assist the researcher, ensuring that he understood and interpreted the response, comments and feedback correctly and accurately, entailed various aspects. In the first instance, qualitative data analysis is less standardised, with a wide variety of approaches. For this

purpose, the researcher had chosen from a specialised, standard set of data analysis techniques (Merriam & Grenier, 2019), to assist the researcher, leading to new concepts and theory by blending empirical and abstract concepts.

Qualitative data analysis is in the form of words, which are relatively imprecise, diffused and context-based (Merriam & Grenier, 2019). Understanding the data analysis procedures was very important and crucial for the researcher (Merriam & Grenier, 2019), as it was expected to assist the researcher in becoming familiar with a range of inferential statistics and their applicability and limitations in the context of the research project (Richards, Killian, Graber & Kern, 2019).

Data analysis was an ongoing activity, which not only answered the question but also gave the researcher directions for future data collection (Merriam & Grenier, 2019). The accuracy and the reliability of the data were of utmost importance for the success of the study and was collected meticulously. The data was analysed based on the integrity of non-scientific knowledge to verify the accuracy in the decision-making process (Merriam & Grenier, 2019).

Data analysis procedures (DAP) were implemented to help the researcher arrive at the data analysis (Sarstedt, 2019.). The data analysis was expected to assist the researcher in converting data into information and knowledge and to explore the relationship between variables (Sarstedt, 2019). A systematic observation had to be followed to specifically confront and level out the direct bias that the researcher had developed (Sarstedt & Mooi, 2019).

Axial coding was applied where keywords that were mentioned or highlighted by the interviewees had been grouped. These groupings lead the researcher to their findings. These groups and finding were then broken down into categories which speak to each of the three focal points. Acquiring knowledge in a controlled manner implies that the condition under which the data was obtained, represents the conditions to which the data applies (De Silva, 2018).

### **3.6 Ethical Considerations**

Ethical considerations relate to the moral standards that the researcher considered in all the research methods in all stages of the research design. Mechling, Gast and Lane (2018) list crucial principles relating to ethical behaviour, which the researcher had submitted and taken into account in his ethical clearance application form, which was approved by Da Vinci.

The first point addressed was freedom from harm. In this study physical harm was not considered, however, the researcher bore in mind that the psychological consequences needed sensitivity. The researcher was sensitive to the participants' emotions when posing probing questions that could psychologically harm the participants. The researcher told the participants that if they felt that some parts of the interview were unreasonable or made them uncomfortable, they were free to withdraw from the study or choose not to answer the questions

Secondly, freedom from exploitation was considered. Participants in this study have been protected from disputant situations. They have been assured that their participation or the information they provide, would not be used against them. The researcher-participant relationship was not abused. The

recordings and written narratives were safely stored and were destroyed after the study. The researcher did consider the risk-benefit ratio and kept risk to the minimum. The participants also confirmed that they did benefit by sharing their ideas with the researcher as to what and why certain questions were asked relating to requirements for a sustainable competitive advantage.

Thirdly the right to self-determination was taken into account. The right to self-determination implies that prospective participants should not be coerced into taking part in the study. Participants were approached, and the purpose of the study was explained. No remuneration was offered, and participants were informed of the opportunity to withdraw at any stage of the research. Verbal and written consent was obtained. Individuals who refused to participate were not coerced into participation. The researcher did share the aim and purpose of the study, the type of interview and other data collection processes with the participants. This included the right to privacy, which means that the information provided by participants would not be shared without their permission, as they had duly been informed.

Concealment, which is the inability to link material to participants, was upheld. There was no identification of people at or upon recording and, besides, these recordings were to be destroyed. The participants were assured of confidentiality verbally and in the written consent form.

### **3.7 Trustworthiness of the Study**

The researcher enhanced the trustworthiness of the study based on Shenton's (2004) four criteria for that purpose. The first criterion, credibility, was to demonstrate that a true picture of the phenomenon under scrutiny was being presented. As regards the second criterion, transferability, the researcher ensured that sufficient detail of the context of the fieldwork of the prevailing environment was similar to another situation with which he is familiar and that the findings can justifiably be applied to the other setting. Thirdly, the researcher ensured that the dependability criterion, that is difficult to meet in qualitative work, was properly recorded to guide or enable a future investigator to repeat the study. Lastly, confirmability was demonstrated by the key findings, and not predispositions, that emerged from the data.

### **3.8 Conclusion**

In this chapter, the researcher has described the research methodology and the approach that was taken. The purpose of the research design was to exploit valid answers to the research question. This was achieved by using a non-experimental, qualitative, exploratory-descriptive approach that was contextual. The research was a qualitative, exploratory study, using an inductive mode of enquiry. The source of data gathering for this exploratory research was interviewing. The researcher interpreted the data by using a descriptive method to analyse it and by ensuring that the data was trustworthy.

## CHAPTER 4

### Presentation of Findings

#### 4.1 Introduction

The problem statement, background and rationale for this research were introduced in Chapter One. The literature review was presented in Chapter Two. From the literature review, it became apparent that there were various factors or gaps between the available literature and the current problem that the researcher needed to consider and investigate.

The methodology that was applied in conducting and completing the research project was discussed in detail in Chapter Three. The research approach, data gathering techniques and tools of analysis were explained in that section, and the research paradigm and design were presented.

Before starting with the interpretation and findings, it should be born in mind that the researcher had done a pilot case study and survey in 2016, as highlighted under point 2.4.2, to validate some assumptions that he expected to encounter throughout the research project. All those findings, it should be noted, have again been validated and cross-correlated with the participants during the current research interview.

In this chapter, the feedback and information received by the experts regarding the relevant questions and focal points will be highlighted. The focal points will be explained in Chapter Four.4.1 under the development of categories or emerging themes.

#### 4.2 Overview of the Interview Process

Leedy and Ormrod (2014) state that a researcher begins with a large body of information and must, through inductive reasoning, sort and categorise it and gradually boil it down to a set of abstract, underlying and manageable focal points. By analysing the content, the researcher is often the instrument that determines the specific characteristics to be studied after having carefully scrutinised the body of evidence that had been collected. This leads to possibly meaningful recognisable characteristics that can be counted.

In this study, a characteristic was only counted once, even if it was mentioned more than once in response to a specific question. The perceptions and beliefs of participants are at the heart of qualitative research, and the semi-structured interviews conducted allowed the researcher to learn about their opinions and perceptions about the needs and desires of future customers in the ISP and ITC environment (Mayhew, 2017).

As highlighted in Chapter Three, axial coding was used by comparing one unit of information with the next, looking for recurring regularities. The data was broken down into parts, assigned to the bits of

categories or classes that formed the base for the emerging themes. The detail regarding the coding process will be discussed in Chapter 4.4, Overview of the analysis process.

The participants were given the background regarding the purpose of the research and the researcher's intentions before their being asked to sign the informed consent form. The interview questions were exploratory. The questions were designed to detect patterns and common focal points as highlighted in the participants' accounts. Each interview lasted for about 45 minutes to one hour, and the participants could respond to the questions openly to prevent the researcher from influencing their response. The researcher referred to participants by number, for example as P1 up to P8, to safeguard the confidentiality agreement with participants.

In this research, the interviews were guided to avoid leading questions and the introduction of bias. A working awareness of bias is imperative in all interview research (Creswell, 2013). As highlighted in Chapter Three, the researcher expected to achieve this by making sure that he interpreted and understood what the participants were saying or answering, as well as being as clear and direct when asking the questions to prevent any misinterpretation or grey areas.

Recordings were verified for context and content accuracy before analysis began. These precautions and the fact that the conclusions that were drawn were grounded in actual data, helped minimise the risk of bias.

### **4.3 Overview of the Analysis Process**

The data that the researcher collected from the interviews were analysed strictly and systematically to discover and measure the common similarities and keywords which the participants used. As mentioned in Chapter Three, the researcher used axial coding, which Corbin (2008) explains as a crosscutting or linking of related concepts to each other as a technique and procedure for developing grounded theory. The reason why the researcher selected axial coding is because of the expected similarities and overlapping concepts shared by all these participants.

Appendix A provides a detailed list of interview questions (Appendix A). The relationship between the focal points and emerging themes were considered systemically. Participants were requested to respond to questions based on their experience and knowledge. During the interviews, it was important for the researcher not to restrain the participants but to give them time to talk about how they understood and described their experience of operating successfully within the ISP and ICT environment.

The data that was collected from the different interviews were combined, analysed and interpreted, culminating in the final results report. During the data analysis phase, the findings from the interviews were merged or integrated to gain a better understanding of the barriers and enablers of the processes followed in organisations regarding culture, change management and delighting future customers.

Every response to the interview questions was captured onto a spreadsheet using Microsoft Windows Excel software 2003. Each row was dedicated to a respondent. Appendix G illustrates the summarised

responses related to the questions. A process of inductive reasoning was used to determine the focal point and concepts of the respondent, associated with the specific question. This is illustrated in Appendix F. The interviews were documented in Microsoft Word format. Tables were created in Microsoft Excel to allow the data collected to be segmented in rows and columns. This format was chosen to analyse the data, as it allowed for more information to be entered into a single field of the table displayed on screen than allowed by Microsoft Word.

Each question was inserted into a row and every respondent linked to the question was labelled and entered (Appendix G). The responses were then summarised and labelled with numbers where the responses carried the same meaning or were related. The meaning was then labelled (Appendix F). A framework of focal points and characteristics (Table 9) was developed from the summarised meaning in Appendix F and Table 9. A framework for the coded interview questions comparing the coded interviewees with the coded responses was developed. If a response related to a specific characteristic in a focal point was mentioned more than once in an answer, the summary counted the characteristic once. For reference to meaning, please consult Appendix F.

The elicitation process involved transcribing all interview recordings to validate trends and points of interest that were raised by the participants. The researcher provided adequate time to review each recording as some were long. To ensure that all the valuable information was gathered correctly and adequately, the researcher reviewed and verified the data collected for accuracy before analysing the actual data collected.

#### **4.4.1 Development of emerging themes and related focal point questions**

According to Elo (2008), emerging themes are the grouping of examples such as events, procedures, occurrences or focal points that share central features or characteristics. As mentioned at the start of Chapter Four, these themes would relate to the focal points described in the literature review. The response to each question was numbered with a unique letter confirming the focal point and the number confirming the related question. The questions the researcher refers to as focal points that consisted of the following:

##### **4.4.1.1 Focal Point A: The best performance criteria**

Six questions were asked regarding this focal point: Firstly, What are the biggest challenges that are currently being experienced in the ICT and ISP environment (A1)? Secondly (A2), What is your approach to overcoming these challenges mentioned in A1? Thirdly (A3), What is the biggest risk currently impacting the ISP and ICT environment? Fourthly (A4), What are the opportunities that might exist because of this? Fifthly (A5), What would you highlight as the 5 main characteristics and necessities of future customers in the ISP and ICT environment? Lastly (A6), What is required from an operational perspective to delight future customers? These questions all bear upon what is needed to capitalise on the window of opportunity from an operational perspective.

#### 4.4.1.2 Focal Point B: Organisational characteristics for effective change management

The five questions that were asked with reference to this focal point were: How have you successfully approached and managed change management in your organisation/ environment/ area (B1), in the first instance? Secondly, In your view what would be the best approach in handling problematic/non-performing staff as well as staff that is resistant to change (B2)? Thirdly, Do you agree with the Leadership challenges in the VUCA world and what has been your strategy or approach to overcome them (B3)? Fourthly, In your view, what do you see the organisation’s approach needs to be for talent attraction, retention and growth relating to the future (B4)? In this instance, the researcher attempted to clarify if it is not better to rather outsource the best-suited team at any specific time for any specific products or requirement. Lastly (B5), What is the participant’s opinion regarding contract staff versus permanent staff, and what should be the best approach?

#### 4.4.1.3 Focal Point C: Preferred elements for the right culture

The three questions that were asked in connection with this focal point were, How does the respondent define the culture of the organisation and what part does he or she think it plays within the organisation (C1)? Secondly (C2), What would you say are the key factors and criteria to get the correct cultural fit for the organisation? Finally, What is the participant’s opinion of culture versus the company’s vision and how does the participant see that relationship (C3)?

Table 4.1 Framework of the Emergent Themes Derived from Transcribed Interviews

Theme Code	Main Themes	L1	Categories	L2	Sub Categories
<b>1</b>	<b>Success Criteria to delight future Customers</b>	1.1	Macro Environment	1.1.1	Understanding the Customer
				1.1.2	Customer Experience
				1.1.3	Communication/Transparency
				1.1.4	Collaboration/Relationship
				1.1.5	Customer Sustainability (Local/Global Success)
				1.1.6	Credibility and Trust
		1.2	Micro Environment	1.2.1	Strategy Alignment
				1.2.2	Systems and Workflows
				1.2.3	Customer Technologies/Innovation Advantages
				1.2.4	Ongoing Service Improvement
<b>2</b>	<b>Change Management</b>	2.1	Long-term	2.1.2	Define and Design and Execution
				2.1.3	Performance Management
				2.1.4	Report and Recognition
		2.2	Sustainable	2.2.1	Employees perception
				2.2.2	Subcontract
				2.2.3	Capabilities/change
		2.3	Buy-in	2.3.1	Personal/stability
				2.3.2	Communication/Transparency
				2.3.3	Understanding/passion/energy
<b>3</b>	<b>Right culture fit</b>	3.1	Behaviour	3.1.1	Mindset
				3.1.2	Customer Centric
				3.1.3	Teamwork/challenged
				3.2.1	Trust/long term
		3.2	Value Workforce	3.2.2	Ownership/growth/performance
				3.2.3	Knowledge/improved/challenged
				3.2.4	Society/Transform/interested

Table 4.2 Framework of the Main Themes by Objective



Theme Code	Main Themes	L1	Categories	L2	Sub Categories	Related/More detail	Count
1	Success Criteria to delight future Customers	1.1	Macro Environment	1.1.1	Understanding the Customer	Biggest Challenges	21
				1.1.2	Customer Experience	Overcoming these shortcomings	18
				1.1.3	Communication/Transparency	Biggest risks facing your ISP or ICT industry	14
				1.1.4	Collaboration/Relationship	Biggest opportunities	8
				1.1.5	Business and Customer Sustainability		24
				1.1.6	Credibility and Trust	Managing the customer relationship (What changed)	8
		1.2	Micro Environment	1.2.1	Strategy Alignment/Cost	5 main characteristics and necessities of future customers	10
				1.2.2	Systems and Workflows		8
				1.2.3	Customer Technologies/Innovation Advantages		35
				1.2.4	Ongoing Service Improvement/Growth/change		31
				1.2.5	One Approached	Capitalise on the window of opportunity	9
				2.1.2	Define and Design and Execution	The dead horse theory. Manage and measure	3
				2.1.3	Performance Management		10
				2.1.4	Report and Recognition	Best approach in handling problematic/non-performing staff	0
				2.2.1	Employees perception/Part of the team		2
2	Change Management	2.2	Sustainable	2.2.2	Subcontract		7
				2.2.3	Capabilities/change Management process	Leadership challenges in the V.U.C.A world, How to overcome	6
				2.3.1	Personal/stability		18
		2.3	Buy-in	2.3.2	Communication/Transparency	Talent attraction, retention and growth	8
				2.3.3	Understanding/passion/energy	Contract Staff vs permanent staff	10
				3.1.1	Mindset/Culture		21
3	Right culture fit	3.1	Behaviour	3.1.2	Customer Centric	Definition of culture	16
				3.1.3	Teamwork/challenged	Key factors and criteria	18
				3.2.1	Trust/long term/safe environment/Honesty	Overcoming these cultural stumbling blocks	24
		3.2	Value Workforce	3.2.2	Ownership/growth/performance	Teamwork, suggested approach	18
				3.2.3	Knowledge/improved/challenged/Critical Thinking	Expand a team's comfort zone	11
				3.2.4	Society/Transform/interested	Success criteria for the future operational environment?	13
							371

#### 4.5.1 Theme One derived from Focal Point A: Best criteria to *delight* future customers

Depicted above are the key findings from each applicant concerning the questions posed with reference to focal point A. Theme one is grouped in three subthemes, being Future Customers, Necessities, Transparency, Collaboration; and Relationship, Technology and Innovation and, finally, Increase Market Share for a Sustainable Competitive advantage. Below is a more detailed elaboration on what the researcher has learned and found relating to the best performance criteria for ongoing operational success.

##### 4.5.1.1 Future Customers, Necessities, Transparency, Collaboration and Relationship

The first interviewee stated in his own words “Do not fragment the customer experience, rather build relationships and be completely transparent with the customer”. This can be achieved by Operations attending all weekly customer meetings with Sales. Also, from a strategic point of view, it is important to understand where the customer is going. It is also important for the customer to understand the challenges Operations are experiencing. This should enhance the partnership and should create trust with the customer.

Another point that stood out was the need to modernise legacy systems and making sure Companies and or Clients do not just work around it and by doing so, negatively affect the productivity output. Also highlighted was the need to continuously get the basics right and to understand that customers are now considerably more demanding as they are increasingly better educated technologically. The way that different approaches and methods could be used to create a “better” culture stood out during the interviews. What became apparent was how the older generations were more client-centric, understanding the customers’ problem, compared to the millennials that did not understand or care about the customers’ issues, but compensated for it by adding value with their higher energy levels and ability to adapt to change more easily than the older generation.

Quite interestingly, being able to have a relationship with the customer was also mentioned, as this would allow one to have a physical point of connection with the customer, so that one could continuously position the company trying to stay ahead of the curve in relation to global and local factors. The researcher was surprised that this was raised, as he had expected that these things inevitably happened. The objective to get the basics right and offer a solid affordable service to the customer by removing customers' problems came across strongly. It was highlighted that this could be achieved by focusing on quality, delivering on time and delivering what one promised to deliver. The message was to treat current challenges as a window of opportunity, and not to delay.

The old cliché of staying relevant and ahead of one's competitors was also mentioned, but what stood out for the researcher was the "how". Points on the aspect of "how" that were highlighted, were the need to accurately use systems, to understand the customer's lifecycle as products become irrelevant. Participants stressed the value of explaining in detail to the customer how the services and product changes would affect him or her as well and come up with solutions together.

Some points, from inside the organisation, that were raised, was the need for people to communicate properly and be aware of the negative effects it had on the business if they did not. This referred particularly to the risk that arises when people do not seem to interact or communicate properly thereby creating a lot of confusion, as emails and WhatsApp messages are being misinterpreted. Verbal dialogue and face to face discussion seem to be the answer. This appears to be quite obvious, but what stands out is the ripple effect that an act of unsuccessful communication has on the organisation.

#### **4.5.1.2 Technology and Innovation**

The most commented-on category was that of technology and innovation. The recommendations from the experts were both positive and negative. The positive aspect was how all of them validated the notion that technology and innovation needed to be implemented and prioritised to be more cost-effective, creative and efficient to delight future customers.

The Fulfilment, Assurance and Billing (FAB) process was highlighted on several occasions, mainly to highlight how it differs between the ICT and ISP environment. The process cannot just be copied. Each FAB process needs to be properly thought through, tested and only then implemented. Another point raised was the need for companies to make sure that they have the relevant skills in place to offer a simple solution to the customer. The need to constantly think differently was also highlighted and what was learned from it was the continuous need to be able to act faster to successfully counter and match disruptive technologies to continually delight one's customers. This approach expects and allows one to still charge the customer a premium.

The negative part mentioned by four of the seven interviewees was the staff's resistance towards embracing technology, as they are fearful that it would lead to job losses. It was recommended that extra effort be made to communicate with the staff so that they can clearly understand the objective to grow, as well as what the plan relating to their own position in the company entails.

#### **4.5.1.3 Increase Market Share for a Sustainable Competitive advantage**

Customers must remain successful for them to be able to pay, grow and expand. This can also be achieved by making sure that businesses become more and more agile by using more accurate automation, breaking down silos, having faster systems integration and digitisation processes.

Another interesting point is to understand the customer's lifecycle and then adapt accordingly, so that the customer is educated and informed in advance of how the services and product changes will affect him or her. Organisations and business are expected to be more successful if they have a single approach to service in the organisation instead of various service approaches from each silo within the organisation.

The last matter that was highlighted was the need for transformation in South Africa, the need to use global stations and use the best the world could offer, like global hubs, demutualisation and outsourcing operation needs where possible. All this should allow one to be more competitive and relevant within the market, which would assist in increasing market share towards a sustainable competitive advantage.

#### **4.6.1 Theme Two derived from Focal Point B regarding effective change management**

Theme two consists of two subthemes, the one being detailed performance management and the other one staff member characteristics. These were the most two common categories that the researcher encountered when discussing the findings. The view of the applicants in respect of the second theme was clear: nobody likes to change if they do not know and understand why things are changing.

It is interesting to note that all applicants mentioned that restructuring was not always a bad thing and could be used to differentiate yourself from the competition. Consensus was that change management was needed, as the industry's environment changed consistently.

##### **4.6.1.1 Detailed Performance Management**

All the respondents highlighted the need for accurate, direct and detailed performance management. The KPIs that are identified needed to be very clear, achievable and continuously and timeously reviewed and managed. Companies should not easily approve headcount, only when the long-term goal regarding that position was clear. In addition, if staff members were not performing, they needed to be dealt with directly, timeously and accurately, as time could be wasted on micro-management.

Another finding that stood out was the approach to only invest in areas that were growing and cutting your losses fast and directly in areas, sectors or divisions that were not growing. Also stressed was the need to keep staff involved with the latest technology and making sure that constant recognition is given. The last interviewee placed a lot of emphasis on keeping staff members challenged as part of their internal career path, which seemed to be another common deduction.

Challenging staff members could be achieved by getting engineers and other departments out of their comfort zones by working together. Cross-skilling would be one way. The following practical example

was mentioned: Should a major outage or problem occur, let all the teams stay behind and fix the problem. Also recommended was that intellectual property and skills transfer needed to be prioritised so that the younger generation or new staff members were not left behind.

#### **4.6.1.2 Staff Members' Characteristics**

Preparation for change is very personal in nature and should involve everybody affected; the long-term vision and plan needs to be clear. The company still has to be a safe environment for the staff member to work in and his family must be taken care of. The family ought to be taken into account first and then the business concerns should follow.

The characteristics of the preferred future staff member mentioned in the interviews were very fascinating to the researcher. The consensus was to avoid negative people. There was even a recommendation that newspapers should not be read at work, which highlighted to the researcher the sentiment that everything needed to be done not to lose focus or waste time within the ISP or ICT environment. The focus had to be on the good, positive hardworking staff that would change the world for the better. When you needed to increase headcount, the general response was to hire people with passion, positive attitude and character.

People could be trained in most skills; of importance was that the person fitted into the company's long-term future. Thinking and commitment could not be expected from contract staff, only from permanent employees. Permanent staff members are at the core of the business function and share the vision of the organisation. Permanent staff members described themselves as the DNA of the business, as quoted by four of the seven experts, who continued saying that they are still the voice of the business.

The last finding regarding the permanent versus contractor matter was that it might be an advantage going forward for the business to justify creating a mediator area or involving, appointing or selecting a person that focuses on predicting what the best services and staff approach would be for a specific solution or product. Getting the strategy right and executing it had been mentioned frequently, and the approach that stood out for the researcher was captured by the Qkon representative's phrase "Plan the work, work the plan and the plan will work". Getting the strategy right is key, but executing the strategy was even more important.

Finally, the critical opinions and feedback provided that were most prominent related to two points: making change personal for every staff member that will be affected and making sure that staff members understand exactly what role they need to play and how it will affect them. The experts predicted that if this happened, the success rate and accuracy of the change management process would be much higher. Passionate and well looked-after employees are expected to assist more effectively in overcoming difficult times. The conclusion that the researcher came to was that tough, difficult economic times will happen and will continue to happen and sometimes one had to face out the difficult times, climb the mountain, even if one does not know which route to take.

#### **4.7.1 Theme three derived from focal point C regarding the right culture fit**

Theme three consisted of two subthemes. The first one was the wellbeing of staff members and the second one the mindset of people. These were the two most common emerging categories that the researcher noted when discussing the findings.

##### **4.7.1.1 Wellbeing of Staff Members**

A common finding regarding culture that stood out for the researcher was that of the wellbeing of the staff members and the staff members' families. Generally, the culture within the organisation seemed to be more positive and productive if the staff was well looked after. The indication was that under these conditions, staff would risk more and collaborate and participate outside of their comfort zone.

As highlighted, culture drives an organisation's behaviour, with the principles of culture remaining the same across all countries, languages and religions; the main aim being to help people to understand the end goal. Understanding the end goal will be achieved by showing the staff what value they can add by reaching the end goal, as people are much keener to change and add value once they understand what the end goal is.

Staff plays a major part in culture, but one other finding that stood out was the role that management plays in culture. Culture is a people's thing. Management needs to create a platform for recognising the achievements of staff. One of the significant findings was the expectation that management should lead by example and that every staff member should similarly take pride and ownership in whatever they do.

##### **4.7.1.2 Mindset**

Interestingly, the researcher received different responses when culture and its meaning had to be defined. The responses ranged from culture as being a native traditional summary of a person on the one side, through to culture being what the team is being known and labelled as. However, the common feeling and approach all had something in common. A clear trend emerged, to regard culture as something that drives the behaviour of staff when supervision, manuals and policies fail to provide a service or solution to a customer.

Another noteworthy finding that was the need for cultural programmes to assist in addressing the points highlighted, as the necessary time, effort and approach from the relevant manager or management team were not always forthcoming.

The majority of the suggested best practices and recommendations pointed towards three areas that the researcher has validated as the type of culture that is required to support ongoing success within the ICT and ISP environments. The first point was that the required culture is impossible to achieve if there is no trust and honesty between staff and management, and internally in general. The coding confirmed that these were the fundamental issues that the required culture was built on. The second

point was that there has to be a safe environment for all staff to operate in and execute their tasks. Again, the feedback confirmed that the required culture was not possible if “safe place “were not in place.

The last point concerned clear visibility and understanding of the long-term goal. The argument was that the right culture fit would develop if these three fundamentals were in place. Trust cannot be enforced and creating trust does take time. What the researcher learned is that culture is all about trust, as the principles are the same. The customer also needed to know that they can trust the organisation.

Two mottos arising from this theme that need to be kept in mind by each staff member, are 1) maybe is never good enough, and 2) tomorrow is not just another day, make it count today. What stood out in the findings was that if this platform was created, staff would approach matters in a more entrepreneurial spirit.

#### **4.7.1.3 The results from the focus group**

The focus group highlighted and provided a different cohesion compared to the one on one interviews. The staff members were very vocal and direct in the focus group, something the researcher has urged and invited. Key findings from the focus group indicated the lack of internal collaboration, pointing out that staff were not working together and only focusing on their respective areas. Another pertinent issue raised in the discussion was the staff’s perception that processes and internal meetings were more important than the customer’s needs or putting the customer first.

Another key finding that stood out for the researcher was the issue raised by the focus group that internal arguments between divisions such as sales & product & project management affected their motivation and approach directly. Staff were also concerned that they were not allowed to evaluate their managers via a 360 Assessment.

The last key finding that was discussed and highlighted by the focus group was most disconcerting for the researcher. . The group mentioned that they felt that they did not have control over their KPI’s and bonus. They were of the opinion that unrealistic targets were being set by their managers and that they just continuously tasked with new and multiple roles that were not related to their current position.

All three abovementioned findings resonate well with theme three, underlined the fact that the search for the right culture fit would never be completed; it would be a continuous drive of ongoing focus, attention and participation from the staff to be customer-centric and delight future customers. Some preconceived ideas and approaches to drive this with the staff was also mentioned, which interested the researcher immensely; the preconceived mindset of being positive and surrounding yourself with positive people and excluding negative people applied in particular, along with making a clear decision not to be negative at work, combined with a get-up-and-do-it-yourself attitude.

#### **4.8 Chapter Summary and Conclusion**

Chapter Four offered all the key findings and best practices that were provided by the experts during the interviews in the context of the questions and emerging themes around the relevant focal points. The researcher is satisfied he has received the measurements, recommendations and best practices he was looking for related to his primary and secondary questions. The first one pertained to the performance criteria for ongoing operational success within the ICT and ISP environment. The key themes and findings that were listed and highlighted can be used as performance criteria.

The second question addressed the organisational characteristics that would detect and predict effective change management within the ICT and ISP environment. These characteristics listed will allow the researcher to manage change management more effectively. Lastly, questions to find out what the predicted elements required to establish the right culture fit within an organisation were, also achieved their aim to the satisfaction of the researcher.

In the complex and competitive world in which we live, where technological and cultural changes happen at a rapid rate, it becomes difficult for brands to remain relevant and to provide individuals and customers with a value proposition. Therefore, acknowledging the importance of sustainability and redefining the organisation is essential for innovation to flourish. We live in a complex world; one in which events can have a myriad of interrelated causes and an infinite number of possible results. The reality is to accept that organisations are fluid, chaotic and subject to unforeseen fields of energy. These concepts present leadership with the constant need to change.

This study has placed extensive focus on the collection of data. In this chapter, the findings from the participants' experience, which was directed at key finding principles on how to delight future customers, were discussed. A considerable part of this discussion was about the success criteria for successful change management and having the right culture within which to do it.

A detailed explanation of the approach to the interviews was provided. Reference to memos, transcripts and data analysis has been provided throughout the chapter to adequately illustrate the process of developing the three focal points categories. This chapter provided an interpretation and analysis of the findings from the interviews. The recommendations and action plan will now be elaborated on in Chapter Five.

## CHAPTER 5

### Conclusions and Recommendations

#### 5.1 Introduction

The problem, background and rationale for this research were introduced in Chapter One. Chapter Two provided an insight into the literature currently available regarding which characteristics and processes are being used from an operational point of view, and how they are affecting or impacting on the customers within the ICT and ISP environment. In Chapter Three, the study design, including the research approach, data gathering method, and analysis tools were listed and explained.

Chapter Four presented the results of the qualitative research design of the exploratory study and highlighted the key themes and findings which led to the success criteria characteristics being defined. Finally, there was an assessment of the findings which lead to establishing the best practises going forward, as well as suggestions for future research.

This final chapter reflects on the purpose of the overall study. The aim and objectives, as introduced in Chapter One, are revisited. During this chapter, the themes that emerged from the interviews and the relationship amongst the categories are expected to elucidate the practical theory.

The primary research consisted of seven in-depth interviews with experienced participants across most of the ICT and ISP environment. The study aimed to develop a substantive grounded theory regarding what the defining points were of future technological operational business needs to maintain a sustainable competitive advantage in order to delight future customers.

The study also aimed to validate the success criteria characteristics, from an operational point of view, that would allow the organisation to continuously make an impact and add value to existing and future customers within the ICT and ISP environment for a sustainable competitive advantage. The three objectives were the following: Firstly, to validate the successful criteria characteristics that are expected to delight existing and future customers within the ICT and ISP environment from an operational point of view. Secondly to detect the key success criteria relating to effectively executing the change management process continuously within the ICT and ISP environment. This refers to the question of whether the change management has to become an embedded function in the organisation to ensure operational success that would add value to customers within the ICT and ISP environments continuously. Lastly, to predict what type of culture is required that would support on-going success as well as an operational success within the ICT and ISP environments.

The first objective and the aim differ in that the first objective speaks about what is needed to delight existing and future customers operationally, with the aim of focusing more on the organisation in general and what is needed to make a continuous impact on existing and future customers within the ICT and ISP environment.



### **5.1.1 The aim and objectives of the study were met as follows:**

The research assignment further aimed to predict the success criteria characteristics, from an operational point of view, that will allow the organisation to gain a sustainable competitive advantage by delighting existing and future customers within the ICT and ISP environment.

There were three objectives: Firstly, validating the success criteria characteristics from an operational point of view that are expected to delight existing and future customers within the ICT and ISP environment. Secondly, detecting the key success criteria related to effectively executing the change management process continuously within the ICT and ISP environment. This refers to the question whether change management has to become an embedded function in the organisation to ensure operational success that will add value to customers within the ICT and ISP environments continuously; and lastly, predicting what type of culture is required that will support on-going success as well as an operational success within the ICT and ISP environments.

The success criteria characteristics, from an operational point of view, that will allow the organisation to continuously make an impact and delighting existing and future customers within the ICT and ISP environment are summarised below.

#### **5.1.1.1 Success criteria characteristics to *delight* existing and future customers**

Recommendations were to not fragment the customer experience, rather build relationships and be completely transparent with the customer. Also, understand the customer's lifecycle and then adapt accordingly, so that the customer is educated and informed in advance on how the services and product changes will affect him. The business or organisation needs to have a single sales approach to the customer that includes all services and products. It was important to have a relationship with the customer so that one has a physical point of contact, allowing one to continuously position the company to try and stay ahead of the curve in terms of global and local factors. The need to provide a solid affordable service that removes customer problems should also be focused on. Further, it was necessary to stay ahead of the competitors by accurately using systems and understanding the customer's lifecycle.

#### **5.1.1.2 Key success criteria relating to effectively execute the change management process**

Additional findings and recommendations were to make sure that the staff has the relevant skills in place, to offer simplicity to the customer. The focus has to be on ensuring that the customers remain successful so that they can pay, grow and expand. Recognising the continuous need to be able to act faster to successfully encounter and match disruptive technologies will allow a company to continuously delight its customers

#### **5.1.1.3 Type of culture required for on-going success**

Additional findings and recommendations included the following: Constantly get the basics right and understand that the customers are now considerably more demanding and educated. Acknowledge the need to transform South Africa and think and invest big by utilising global stations and use, learn and adapt the best the world could offer. Spend extra effort and communication on reframing this to

the staff members, so that they clearly understand the objective to grow, as well as the plan relating to the relevant focal points.

## **5.2 Recommendation and Plan**

The research aimed to validate the success criteria characteristics from an operational point of view to delight future customers within the ISP and ICT environment. These characteristics were listed above under 5.1.1. The detailed plan on the steps that need to be taken are documented below. The researcher recognises three themes, which aligns with the three objectives and original focal points.

These three themes have predominantly been overlapping and complimenting one another, as a number of the steps recommended apply to more than one theme. What the researcher wants to highlight in the recommendation and plan is how, based on the findings, trends and best practises listed, it could be practically achieved.

The researcher soon realised that the order in which the themes appeared was the other way around. Originally, at the start of this research, it was meant to firstly focus on the success criteria of the future operational environment, then on change management and finally on culture. What the researcher has learned is that it seemed to be the other way around. If the engaging and successful culture was in place, the change management process seemed more successful and less painful for all involved, thereby enabling the organisation or business unit to be more customer-focused or customer-centric, which appeared to be the main objective or goal to delight future customers and gain a sustainable competitive advantage in the market.

In more detail, there are some general trends that the researcher has observed and picked up on aspects that the majority of applicants have in common. This introduced and enabled the flow that led to the objectives that were listed by the researcher in Chapter One. As mentioned above, the key finding highlighted that the objective flow needed to be the other way around, in the order of culture, change management and then delighting future customers—and not as originally indicated.

## **5.3 Organisational Culture**

The objective was to establish what type of culture would support ongoing operational success that would add value and delight customers in the ICT and ISP environments continuously.

This objective can be achieved by adhering to the three fundamentals for the right cultural fit:

1. Trust and honesty between staff and management and internally in general by creating a safe environment for all staff to operate and execute their work.
2. Clear and accurate performance management
3. All members of staff having clear visibility and understanding of the long-term goal.

Additional considerations and recommendations that were listed were to create a culture that drives positive, productive behaviour. These included the following: Make a clear decision not to be negative at work and demonstrate a get-up-and-do-it-yourself approach. Look after your staff so that they can

collaborate and participate more outside of their comfort zone. Place enough emphasis and focus on all generations and get them to complement one another, from the older generation to the millennials. Coach, train and lecture all your staff to be customer-centric and delight future customers. Let them see and understand internal problems from the customer’s point of view. Place more focus on getting staff to understand the end goal or objective. Culture is a people’s thing. Management needs to create a platform for staff to flourish and that will lead to staff taking more risk, more pride and ownership in their work. This platform will drive a more entrepreneurial spirit in its approach at work. Cultural programmes need to be established to assist businesses not to be neglected due to time or priority constrains.

A preconceived mindset is to be implemented in creating a culture among all staff to build and continuously work on all elements of trust. This needs to be evaluated quarterly and steps need to be taken to address the areas of concern; it would be detrimental to leave it and hope that the issues will go away. This needs to be part of the internal cultural programs. Staff members should feel that they and their families are looked after. The culture drives the organisation’s behaviour that, in turn, drives client-centric behaviour. Align the company’s vision with the culture of the organisation and make sure they are aligned. Build your teams with people with the correct attitude; staff and management that are approachable and that have an entrepreneurial spirit in their approach. Entrepreneurial spirit places a strong focus on the importance of constantly thinking of challenges; that will lead to behavioural changes for the better, also keeping up with the latest trends and technologies. All these points listed can be summarised in the figure below, namely why employees stay where they are.



**Figure 5.1: Reasons why employees stay**

The researcher has put this illustration together just to summarise all the key points that he received from all the participants on why employees stay and become the most valuable asset to the company.

#### 5.4 Change Management

The second objective was to validate the key success criteria related to effectively executing the change management process in order to cater for new products and services in the ICT and ISP environment and to monitor the tools for successfully managing this process. This relates to the

question of whether change management has to become an embedded function in the organisation to ensure operational success that will add value to customers in the ICT and ISP environments continuously.

The trends confirmed that the overwhelming majority of respondents indicated that they and their staff did not like change and that it had to become an embedded function in an organisation. This can be achieved by enabling the following two fundamentals:

1. Make it personal for every staff member that will be affected.
2. Make sure they understand exactly what role they need to play and how it will affect them.

Additional considerations and recommendations:

The change management process needs to be personal, involving everybody affected, and the long-term vision and plans need to be clear. The staff member must feel that his family is taken care of: family comes first, then deal with the business. Implement change management as a positive so that the staff understand that restructuring is not always a bad thing and that it used to differentiate the business from the competition. This should lead to new career growth opportunities. A clear need exists for the implementation of accurate, direct and detailed performance management and KPs. The KPIs that are identified need to be very clear, achievable and continuously and timeously reviewed and managed. Companies should not easily approve headcount, only when the long-term goal as regards that position is clear. If a member of staff is not performing, he or she needs to be dealt with directly, timeously and accurately. Only invest in areas that are growing and cut your losses on areas, sectors or divisions that are not growing.

Give constant recognition and introduce cross- and upskilling to keep your staff challenged and interested to learn more. Prioritise for intellectual property and skills transfer to take place to enable the younger generation and new staff members. Demand a preconfigured positive approach from your staff and assist them in achieving it. Focus and invest in staff members who are positive and hardworking, who want to change the world for the better. Hire new staff based on passion and character as far as possible and practical. Look after your permanent staff as they are the backbone of the organisation. Plan the work, work the plan and the plan will work. Getting the strategy right is key, but executing the strategy is even more important and passionate and well looked after employees are expected to assist more effectively in overcoming difficult times.

All this is summarised in the figure: 5.2 below that highlights how to successfully manage change: The researcher has put this change management diagram together just to summarise all the key point that the researcher received from all the participants and illustrate the complexity of what he learned through the research regarding change management and how to manage complex change.

## Managing Complex Change

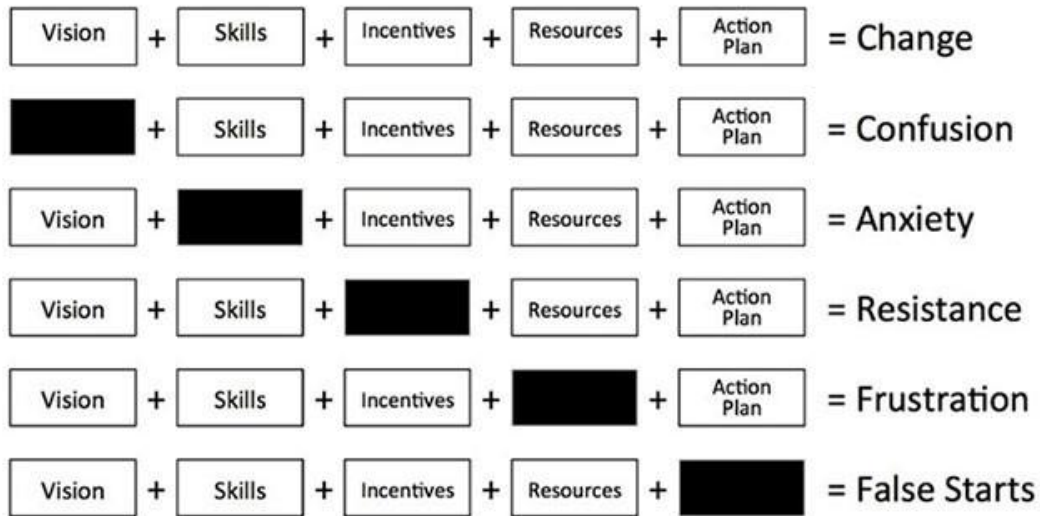


Figure 5.2: Change management.

### 5.5 Delighting future customers for a sustainable competitive advantage

The last objective was to predict the success criteria characteristics from an operational point of view that were expected to delight existing and future customers in the ICT and ISP environment. This can be achieved by implementing the following steps:

Motivating the operations team to attend all weekly customer meetings with the relevant salesperson. Persuading the customer to understand the challenges Operations are experiencing – this should enhance the partnership that should lead to creating trust with the customer that might even lead to joint problem-solving; customers need to know that they can trust you and the organisation. Making sure that business and business units become more agile by using more accurate automation, breaking down silos, having faster systems integration and digitisation processes. Do not continue working with legacy systems if it negatively affects the productivity output, start the process to replace the outdated system.

Focus on quality, deliver on time and deliver what you said you would deliver. Treat your current challenges as a window of opportunity and fix or resolve them, do not delay. The following points internal to the organisation were raised: Recognise the need for people to communicate properly. More verbal dialogue and face-to-face discussion seem to be the answer, and fewer assumptions, WhatsApps and emails. Continuously get the operational basics right and understand that the customers are now much more demanding as they are getting technically more knowledgeable: they will continue to expect more. Offer a solid affordable service and customise where needed with the main aim to prevent problems for the customer. Position the company to stay ahead of the curve as far as global and local factors are concerned; that will allow the business to act faster to successfully counter and match disruptive technologies to continue delighting the customers. Focus on quality,

deliver on time and deliver what was promised to be delivered. Also, treat current challenges as a window of opportunity and fix or resolve the challenge quickly and permanently.

Lastly, to summarise, the valuable findings identified made the researcher aware that the success criteria, change and cultural elements are ongoing and will never stop. It led the researcher to the belief that, from the criteria listed, it is all about staying relevant by continuously adding value to work towards a sustainable competitive advantage.

## **5.6 Limitations**

The first limitation was highlighted at the start of the research under 1.8 in Chapter One, being that the findings and analysis of this study were based on a limited number of participants who represented the ICT and ISP industry. At the conclusion of the study, the researcher is content that the aim and the objectives of the study were met; however, there were further limitations that the researcher would like to call attention to. The researcher acknowledges that he could have used other means of data collection in the form of additional focus groups. The sample size could have also been increased, which would have assisted in representing a higher percentage of the target population. The last limitation to mention is the lack of more international representatives.

## **5.7 Recommendation for further research**

The researcher is content and satisfied that the required criteria for a successful model on how to achieve a sustainable competitive advantage for future technological operational businesses in the ISP and ICT environment are evident. The researcher suggests that ongoing research be done to clearly understand the success criteria for gaining new customers and remaining alert to what it means to be customer-centric, as the requirements are expected to change at the same rate as technology and innovation is changing.

Secondly, the researcher recommends a further study to review this study within the context and perspective of Covid-19 and 4<sup>th</sup> Industrial Revolution. This is important, because the industry and environment are expected to continue to change and transform faster and faster due to the impact that technology and digitisation have on the customers' expectations as well as on the products on offer within the ISP and ICT environment.

## **5.8 Conclusion**

This chapter focused on providing the results of the research conducted, utilising a bespoke interview protocol designed specifically for use in this study. The researcher also provided an introduction to the data collection and analysis process for this study by detailing how the data for this study was collected. The researcher then applied specific aspects from the third chapter of the study, specifically how the data was captured for the study, using semi-structured interviews as well as an interview protocol. An explanation of how the data coding process would work was then provided, before the research question and sub-questions of the study were re-stated.

The researcher is satisfied that the required criteria were successfully identified and listed to create Sustainable Competitive Advantage for future technological operational businesses within the ISP and ICT environment. The researcher has had an enjoyable experience and learnt much about himself as well as the ICT and ISP environment in general while doing this research. In conclusion, this dissertation has offered an in-depth view of what the success criteria and engaging model are for sustainable competitive advantages in the ISP and ICT environment.

The research process, and specifically the interview protocol, produced data that suggested that almost all factors and actions need to be investigated to be and to become more customer centric. In terms of the broader general context, the study provided a view of the leadership and culture approaches adopted in this particular organisation. by having done so, it might assist in achieving greater success with change management, thereby leading to greater organisational success in the ICT and ISP environment. Using this learning, the researcher will endeavour to steer towards a customer-centric leadership approach as the preferred approach when leading teams, particularly as regards ongoing change processes and establishing a successful culture.

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## Appendices

### Appendix A: Interview Questions and Focal point

The challenge this research intends to validate future technological operational business needs for a sustainable competitive advantage

#### **PART 1: DEMOGRAPHIC INFORMATION**

1.1 Current Job Title

1.2 Work level or Job Title

1.3 Current Business Area Environment or Industry

1.4 Current Size of the organisation as well as number your direct reports

1.5 In general and in one sentence what would you describe as your biggest success or biggest achievement at senior management level

#### **Part: 2 Performance Criteria for Operation Success**

2.1 What would you say are the biggest shortcomings and problematic areas when it comes to the modern-day fulfilment and assurance of new products within the network and technologic environment?

2.2 What have you done, implemented or tested to date to overcome these shortcomings?

2.3 Please share what you would rate or predict as the biggest risks facing your ISP (internet service Providers) or ICT (Information and Communication Technologies) industry.

2.4 Please share what you would consider as the biggest opportunities within your industry from an operational perspective to increase market share (key success factors).

2.5 What would you say have changed regarding the role that the operational team needs to play when it comes to managing the customer relationship within future products with IoT type of products as an example?

2.6 What would you highlight as the 5 main characteristics and necessities of future customers within the Network and technology environment?

2.7 What would you say must be the correct approach or best position to capitalise on the window of opportunity from an operational perspective within the ICT/ISP environment?

### **PART 3: Change Management and Culture**

3.1 How have you successfully approached and managed change management within your organisation/ environment/ area?

3.2 In your view, what would be the best approach to handling problematic/non-performing staff as well as staff that are resistant to change?

3.4 Do you agree with the Leadership challenges in the V.U.C.A world and what have been your strategy or approach to overcome them?

Volatility: A brutal increase in four dimensions of the changes that we face today: the type, speed, volume, and scale.

Uncertainty: As a result of the Volatility, we are unable to predict future events.

Complexity: Widespread confusion, with no clear connection between cause and effect, affects all organisations nowadays.

Ambiguity: There is a lack of precision and the existence of multiple meanings within the conditions surrounding us

3.5 In your view, what do you see the organisation's approach needs to be for talent attraction, retention and growth relating to the future?

3.6 In your view, can organisations afford change management and take the time to go through the entire process? Is it not better to rather just outsource the best-suited team at any specific time for any specific products or requirement? Contract staff vs permanent staff?



3.7. How would you define the culture of the organisation and what part do you think it plays within the organisation?

3.8. What would you say are the key factors and criteria to get the correct cultural fit for the organisation?

3.9 In your view, what role do you see technology and innovation will play related to overcoming these cultural and change management hurdles and stumbling blocks?

3.10 Teamwork: firstly, is it realistic to expect the existing team to share skills and store knowledge to become experts in the relevant fields? Secondly, if not, what do you suggest the approach must be?

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3.11 How to get the team to get out of their comfort zone and how do you expand a team's comfort zone?

3.12 What elements, factors or processes do you expect will make up the success criteria for the future operational environment? (Win recipe/model).

**Part: 4 Additional Information**

4.1 Whom do you suggest I should include in the study?

## **Appendix B: Consent Form**

I have read the information presented in the information letter about a study being conducted by Frederik Raath for a Master's degree in Management of Technology and Innovation at the Da Vinci Institute for Technology Management.

I have had the opportunity to ask any questions related to this study, to receive satisfactory answers to my questions, and any additional details I wanted.

I am aware that I have the option of allowing my interview to be tape-recorded to ensure an accurate recording of my responses. I am also aware that excerpts from the interview may be included in the dissertation and/or publications to come from this research, with the understanding that the quotations will be anonymous. I was informed that I may withdraw my consent at any time by advising the student researcher.

With full knowledge of all foregoing, I agree, of my own free will, to participate in this study.

Yes       No

I agree to have my interview tape-recorded.

Yes       No

I agree with the use of anonymous quotations in any dissertation or publication that comes from this research.

Yes       No

Participant Name: \_\_\_\_\_ (Please print)

## **Appendix C: Invitation to Participate Letter**

The Da Vinci Institute for Technology Management

MSc in Management of Technology and Innovation Research Project:

The validations of future technological operational business needs for a sustainable competitive advantage

Supervisor: Pieter du Toit

Research Office: Itumeleng Mokoaleli

### **CONSENT INVITATION**

Dear ... ..... you are cordially invited to partake in the research project conducted by Frederik Quinton Leiding Raath (id number) from the Da Vinci Institute for Technology Management.

This study will contribute to the researcher's completion of his Master's in Management of Technology and Innovation. However, before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please read the following information carefully and ask the researcher if there is anything that is not clear or where you need more clarity.

### **The Purpose of the Research Study**

The purpose of the research study is to identify the success criteria benchmark that can be used to successfully fulfil, execute and support all types of future operational needs. The objectives of the research study are as follows:

- The first objective that the researcher wants to achieve is to have/get identify methods, process and system that can be used to successfully fulfil, execute and support future operational needs.
- The second objective is to see where in the current assurance and fulfilment process can there be more visibility and exposure that will lead to reacting more proactively, being more profitable and making sure that key milestones are met.
- The third objective is to be able to faster understand, summarise and evaluate the requirements of each customer-specific solution from a staff and capacity point of view and being able to position the staff accordingly and accurately. This will include the culture of the team, these businesses are not neglected due to a SWOT analysis, as well as how they embrace change.

### **Role as a Participant in the Research Study**

Your participation in this study is very important because of your experience and expert skills in the areas being researched. The research procedures, risks and incentives associated with the study, and duration of the study are as follows:

- **Research Procedures:** The research study consists of interviews, explorations and discussions that will be administered to individual participants in location (Pretoria), or via the electronic platform (IBM Connections Collaborative Platform). You will be asked to provide answers to a series of questions related to objectives of the research stated above;
- **Risks:** The researcher does not perceive more than minimal risks from your involvement in this study (that is, no risks beyond the risks associated with everyday life);
- **Incentives:** There are no direct incentives to you for participating in this research study other than the expert contribution and venture in a topic you may find interesting;
- **Duration:** Your involvement will be for 1 hour, during which the interviews, explorations and discussions will be conducted.

### **Voluntary Participation and Withdrawal**

Your participation in this study is voluntary. It is up to you to decide whether or not to take part in this study. If you decide to take part in this study, you will be asked to sign a consent form.

Should you choose to participate, you can withdraw at any time without consequences of any kind. After you have signed the consent form, you are still free to withdraw at any time and without giving a reason. Withdrawing from this study will not affect the relationship you have, if any, with the researcher. If you withdraw from the study before data collection is completed, your data will be returned to you or destroyed. However, once your responses have been submitted and anonymously recorded you will not be able to withdraw from the study.

### **Confidentiality and Security**

Your responses to this study will be anonymous. Every effort will be made by the researcher to secure and preserve your confidentiality including the following:

- Assigning code names/numbers for participants that will be used on all research notes and documents, where applicable;
- Keeping hardcopy notes, interview transcriptions, and any other identifying participant information in a locked file cabinet in the personal possession of the researcher;
- Keeping softcopy notes, interview transcriptions, and any other identifying participant information in a bespoke electronic data collection application of the researcher (IBM Connections Collaborative Platform).
- Participant data will be kept confidential except in cases where the researcher is legally obligated to report specific incidents. These incidents include, but may not be limited to, incidents of abuse and suicide risk.
- The relevant data will be destroyed, should you choose to withdraw from the research study before your responses have been submitted and anonymously recorded.

### **Ethical Status of the Research Study**

The study has received ethical approval from the Ethics Committee from the Da Vinci Institute for Technology Management.

## **Giving of Consent**

After completion and successful submission, you will be provided with a complete copy of the thesis document.

Please complete the attached consent response note duly signed to indicate your consent with the participation as described in the aforementioned.

Kind regards

.....  
SIGNATURE OF RESEARCER

.....  
DATE

## **Appendix D: Research Sample**

### P1 – Transcript

1. Interview with the participant: P1
2. Date: 23 October 2018
3. Venue: Executive Boardroom 4LL, BCX, Centurion,
4. Gender: Male
5. Current Job Title: Managing Executive
6. Work Level: Executive Management
7. How long have you worked in the Financial Markets? More than 10 years
8. Business Unit Area: Chief of Telecommunication Solutions

### P2 – Transcript

1. Interview with the participant: P1
2. Date: 12 November 2018
3. Venue: G12 Boardroom, BCX, Centurion,
4. Gender: Male
5. Current Job Title: Managing Executive
6. Work Level: Executive Management
7. How long have you worked in the Financial Markets? More than 10 years
8. Business Unit Area: Sales Director Integr8 (Now part of BCX)

### P3 – Transcript

1. Interview with the participant: P3
2. Date: 21 November 2018
3. Venue: QKON offices, Centurion,
4. Gender: Male
5. Current Job Title: Managing Executive
6. Work Level: Executive Management
7. How long have you worked in the Financial Markets? More than 20 years
8. Business Unit Area: CEO

### P4 – Transcript

1. Interview with the participant: P4
2. Date: 23 November 2018
3. Venue: Nokia office, Centurion,
4. Gender: Male
5. Current Job Title: Managing Executive
6. Work Level: Executive Management
7. How long have you worked in the Financial Markets? More than 20 years
8. Business Unit Area: Managing Director Southern Africa

### P5 – Transcript

1. Interview with the participant: P5

2. Date: 29 November 2018
3. Venue: Dimension Data, Johannesburg
4. Gender: Male
5. Current Job Title: Service Delivery Middle East and Africa, Client Delivery Manager
6. Work Level: Management
7. How long have you worked in the Financial Markets? More than 20 years

P6 – Transcript

1. Interview with the participant: P6
2. Date: 13 December 2019
3. Venue: CEB Maintenance, Johannesburg
4. Gender: Male
5. Current Job Title: Senior Manager: Customer Engagement
6. Work Level: Management
7. How long have you worked in the Financial Markets? More than 15 years

P7 – Transcript

1. Interview with the participant: P7
2. Date: 12 December 2019
3. Venue: African Bank, Johannesburg
4. Gender: Male
5. Current Job Title: Senior Manager: Customer Engagement
6. Work Level: Management
7. How long have you worked in the Financial Markets? More than 20 years

P8 – Transcript

1. Focus Group on Change management and culture with participants: P8
2. Date: 31 July 2019
3. Venue: BCX Centurion Head Office
4. Gender: Male and Female;
5. Current Job Title: 9 Line Managers from various departments
6. Work Level: Management
7. How long have you worked in the ICT/ISP Industry? Between 10 and 20 years

## **Appendix: E-Learning Experience**

For the researcher, several learnings have emerged based on the data analysis and interpretation process. Several possible research studies present themselves as a result of the work undertaken in this dissertation. The researcher would like to suggest that further research could focus on: (i) trends in managing customers' expectations; (ii) best practises and real success stories with change management, and lastly (iii) Future characteristics of a dream culture.



## Appendix: F Interviewee coded transcribed contributions

Theme Code	Main Themes	L1	Categories	L2	Sub Categories	Related/More detail	Count
1	Success Criteria to delight future Customers	1.1	Macro Environment	1.1.1	Understanding the Customer	Biggest Challenges	21
				1.1.2	Customer Experience	Overcoming these shortcomings	18
				1.1.3	Communication/Transparency	Biggest risks facing your ISP or ICT industry	14
				1.1.4	Collaboration/Relationship	Biggest opportunities	8
				1.1.5	Business and Customer Sustainability		24
				1.1.6	Credibility and Trust	Managing the customer relationship (What changed)	8
		1.2	Micro Environment	1.2.1	Strategy Alignment/Cost	5 main characteristics and necessities of future customers	10
				1.2.2	Systems and Workflows		8
				1.2.3	Customer Technologies/Innovation Advantages		35
				1.2.4	Ongoing Service Improvement/Growth/change		31
				1.2.5	One Approached	Capitalise on the window of opportunity	9
				1.2.6	Define and Design and Execution	The dead horse theory. Manage and measure	3
2	Change Management	2.1	Long-term	2.1.2	Performance Management		10
				2.1.3	Report and Recognition	best approach in handling problematic/non-performing staff	0
				2.1.4	Employees perception/Part of the team		2
				2.1.5	Subcontract		7
		2.2	Sustainable	2.2.2	Capabilities/change Management process	Leadership challenges in the V.U.C.A world, How to overcome	6
				2.2.3	Personal/stability		18
				2.2.4	Communication/Transparency	Talent attraction, retention and growth	8
		2.3	Buy-in	2.3.1	Understanding/passion/energy	Contract Staff vs permanent staff	10
				2.3.2	Mindset/Culture		21
				2.3.3	Customer Centric	Definition of culture	16
3	Right culture fit	3.1	Behaviour	3.1.1	Teamwork/challenged	Key factors and criteria	18
				3.1.2	Trust/long term/safe environment/Honesty	Overcoming these cultural stumbling blocks	24
				3.1.3	Ownership/growth/performance	Teamwork, suggested approach	18
				3.1.4	Knowledge/improved/challenged/Critical Thinking	Expand a team's comfort zone	11
		3.2	Value Workforce	3.2.1	Society/Transform/Interested	Success criteria for the future operational environment?	13
				3.2.2			
				3.2.3			
				3.2.4			
							<b>371</b>

## Appendix: G Results - Themes and Category Codes

Research Questions	Interviewee Code	Response	Response	Response	Response	Response	Response
What are the biggest challenges that are currently being experienced in the ICT and ISP environment? (A1)	P1	customer experience	customer expectations	Aligned and Linked	communication	face to face interaction.	Not fragmented
	Class	1.1.2	1.1.1		1.1.3	1.1.3	
	P2	different FAB processes.	people depended	Not automated	Old legacy	Back to the basics	
	Class	1.2.2	1.2.3	1.2.2	1.2.3	1.2.4	
	P3	Not enough skills.	Lack of systematic fought.	Lack of basis science.	Doing proper work not emails.	Lack of Automation	Simplicity is actual very
	Class	1.2.1	1.1.2	1.1.2	1.2.4	1.2.3	1.1.2
	P4	Not following key global trends	Understanding spend patterns.	Not growing organically	Customers financial situation		
	Class	1.1.5	1.1.1	1.1.5	1.1.1		
	P5	Understanding the customers needs.	Not Understanding global factors	Economy impact	Silos	no collaborative effort	
	Class	1.1.1	1.1.5	1.1.5	1.2.5	1.2.5	
	P6	Complexity of products and a	customer expectations (Don't understand)				
	Class	1.1.2	1.1.1				
	P7	very competitive.	new entrances and the es	4th industrial revolution			
	Class	1.2.4	1.2.3				
P8	Unknown that we are entering.	Lack of trust and transparency					
Class	1.1.5	1.1.6					
What is your approach in overcoming these challenges mentioned in A1? (A2)	P1	auto provision capability	Make it personal	True	Touch the customer	Self-services capability	
	Class	1.2.3	1.1.4	1.1.4	1.1.4	1.2.4	
	P2	Predictive Trent's	Clear direction.	Stability.	Back to basics		
	Class	1.2.3	1.2.5	1.2.4	1.2.5		
	P3	Stay relevant.	Stay needed	Trade in the industry	Full transparency to the customer.		
	Class	1.2.4	1.2.4	1.1.5	1.1.3		
	P4	Execution from an operations perspective.	Use global delivery centres	All Silos under one umbrella.		Teamwork	
	Class	1.2.1	1.1.5	1.2.5			
	P5	Automation	Proactive Visibility:	Solid design	Proper cataloguing	entire customer journey	adapt to their lifecycle
	Class	1.2.2	1.2.4	1.2.4	1.1.2	1.1.2	1.1.1
	P6	Simplified the sales process.	selling to an engagement	journey			
	Class	1.1.2	1.1.3				
	P7	stay relevant	being innovative and implementing new and advanced technology	implementing new and advanced technology			
	Class	1.1.5	1.2.3	1.2.3			
P8							
Class							

Research Questions	Interviewee Code	Response	Response	Response	Response	Response	Response
What is the biggest risk currently impacting the ISP and ICT environment? (A3)	Class	1.1.5	1.1.1	1.1.5	1.1.1	1.1.1	
	P2						
	Class						
	P3	Don't be overly scared of the big players.	Connecting to the real world	Not touching the customer.	Real Customer experience	Understand where the customer is going strategically	
	Class	1.1.1	1.1.1	1.1.1	1.1.2	1.2.1	
	P4	Declining Economy	Lack of growth	Big competitors			
	Class	1.1.5	1.1.1	1.1.5			
	P5	The Economic impact,	very disruptive technologies.	There will be less companies going forward.	Smaller only for Nish products		
	Class	1.1.5	1.2.3	1.1.5	1.1.1		
	P6	competitors cutting corners to cut costs in order to remain competitive.					
	Class	1.1.2					
	P7	technological risk a big concern.	Costing	Being relevant to the needs of the customers.			
Class	1.2.3	1.2.1	1.1.1				
P8	old habits,	old thinking and old way of working.	Job losses due to technology and innovations				
Class	1.2.4	1.2.4	1.2.3				
What are the opportunities that might exist because of this? (A4)	P1	Delight our customers	Charge a premium				
	Class	1.1.2	1.2.4				
	P2	Agile processes	More digitalisation	Modernize your legacy systems	less people dependent	innovation	Understand the customers Lifecycle
	Class	1.2.2	1.2.3	1.2.3	1.2.2	1.2.3	1.1.1
	P3	Public sector business	connect the unconnected	Reliable connectivity	Think massive	More future investment	
	Class	1.1.5	1.2.1	1.1.6	1.2.4	1.1.5	
	P4	Regulations must support growth,	Multinational company.	Must have the capability,	technology	spectrum opportunities	New customers
	Class	1.1.5	1.1.5	1.1.1	1.2.3	1.2.4	1.2.4
	P5	Operations plays a much bigger part.	Understanding customers concerns	Understanding customers challenges	Full transparency to the customer.	partnership with the customer	Build or create trust with the Customer
	Class	1.2.5	1.1.4	1.1.1	1.1.3	1.1.4	1.1.6
	P6	Service Delivery	All about Customer Experience				
	Class	1.1.2					
P7	stay relevant	expand our market share.	moved away from their traditional banking function				
Class	1.1.5	1.2.4	1.2.3				
P8							
Class							

Research Questions	Interviewee Code	Response	Response	Response	Response	Response	Response
What would you highlight as the 5 main characteristics and necessities of future customers in the ISP and ICT environment? (A5)	P1	Get the basic's right	Solid service	the price point right	ability to the customer to scale, (Up and down),	customize the service	Keeping checking in with the customer
	Class	1.2.4	1.2.4	1.1.3	1.2.2	1.2.3	1.1.4
	P2	more demanding	more educated	More feedback	operational efficiencies.	Understand were the customer is going strategically	
	Class	1.2.4	1.1.1	1.1.3	1.2.4	1.2.1	
	P3	Digitalise	build a factory to cater for CSS	Simplicity	technology agnostics.	Further industry: entertainment and lifestyle services.	technology agnostics.
	Class	1.2.3	1.1.1	1.1.2	1.2.3	1.1.1	1.2.3
	P4	Latest Technology	Trust	Can they deliver	It is still a people thing	one service approached	
	Class	1.2.3	1.1.6	1.2.4	1.1.2	1.2.5	
	P5	To deliver on time	Deliver what you say you are going to deliver.	Deliver to the price point that you said you will deliver.	'You need to add value to their life	'You need to add value to their life	specialised services on a mass scale
	Class	1.1.6	1.1.6	1.1.6	1.1.2	1.1.4	1.1.2
	P6	more tech savvy a	simple language to the customer.				
	Class	1.2.3	1.1.1				
	P7	banks will not exist in the current format in the near future.	young generation loves technology.				
	Class	1.2.4	1.2.3				
P8	Team work.	transparency					
Class	3.1.3	1.1.3					
What is required from an operational perspective to delight future customers? (A6) This can include what is needed to capitalise on the window of opportunity from an operational perspective.	P1	Window of opportunity is more hind sight,	deal with the challenges now	specialised services on a mass scale			
	Class	1.2.4	1.1.3	1.2.3			
	P2	Network reliability	React Faster	Better systems = more efficient	Analytics	Automation	Make complex systems
	Class	1.2.4	1.2.4	1.2.2	1.2.3	1.2.3	1.2.2
	P3	Products must not be sort lived.	Business opportunities should be sustainable.	Some opportunities fundamentally exist	manage development cost.	you need to do proper planning.	invest/explore Latest
	Class	1.1.6	1.1.5	1.2.4	1.2.1	1.2.1	1.2.3
	P4	Transform	Optimal globalization, use globalization,	build the outsource capabilities.	Quality is becoming a major problem.	get the most out of your assets	Understand trends and when what technologies will
	Class	3.2.4	1.1.5	2.2.2	1.2.4	1.1.6	1.2.3
	P5	Products become irrelevant very quickly.	Understand the customer life cycle.	Customer must be trained and educated	The Business must understand all the new technologies First	Transparent	
	Class	1.1.5	1.1.2	1.1.4	1.2.3	1.1.3	
	P6	All involved operationally					
	Class	3.1.3					
	P7	embrace change	entrepreneurial nature.				
	Class		1.2.4				
P8	, Lead by example management.	Trust and honesty with clear and achievable					
Class		2.1.3					

Research Questions	Interviewee Code	Response	Response	Response	Response	Response	Response
How have you successfully approached and managed change management in your organisation/ environment/ area? (B1)	P1	Understand where the staff member is in life	Understand Staff's IP (Intellectual property)	Drive process to do a skilled transfer to the younger generation.	Understand where key staff members wants to go		
	Class	2.3.1	2.2.3	2.3.2	2.3.3		
	P2	Staff member at ease	Family first	Family first and then only deal with them Business.			
	Class	2.3.1	2.3	2.3		You must face the music and deal with	
	P3	Ops doesn't exist anymore. Ops is now a sales function.	OPS is all part of sales.	Make sure the people is assured.	If comfortable in new skills then they will adapt fast	Guarantee them security.	You can't take everybody through the
	Class	3.1.2	3.1.2	2.3.1	2.2.3	2.2.3	3.2.2
	P4	You can't take everybody through the process.	deal with the staff that have not transformed				
	Class	3.2.2	3.2.2				
	P5	Stability and security	Be aggressive	you can't be negative but not at work.			
	Class	2.3.1	3.1.2	3.1.1			
	P6	biggest lesson learnt is that communication and transparency is key.	The more the employees know and understand, the less scary the				
	Class		1.1.3				
	P7	Inclusiveness of the entire team.	transparency				
Class		1.1.3					
P8	Honesty and transparency	Clear Objectives					
Class	1.1.3	201.3					
What is your opinion of The dead horse theory and how do you manage and measure it? (B2)	P1		Make change personal	Make the staff member part of the	Full transparency		
	Class		2.3.1	3.1.3	2.3.2		
	P2	You can't take everybody through the process.	Deal with the staff that have not transformed				
	Class	3.2.2	3.1.1				
	P3	Avoid negative people,	Be thankful	Get up and do it approach.	Give the individual the choice.	Resolve the problems timeously	
	Class	3.1.1	3.2.4	3.2.2	2.3.2	3.2.3	
	P4	Tough Performance management,	Don't easily approve Headcount, G	Get rid of the area that is not performing.	Cut your losses.	Invest where you want to go.	Focus on the good guys
	Class	2.1.3	3.2.4	2.3.1	3.2.2	3.2.4	3.1.2
	P5	Stability and security within the business,	workable salesforce	Get aggressive sales	Make sure all the sales people get to all the customers.		
	Class	2.3.1	3.1.2	3.1.2	3.2.4		
	P6	part of the journey and the change.	Let them be involved				
	Class	1.1.2	3.1.3				
	P7	performance management process	part of the change journey	Understand the proposed changes			
Class	2.1.3	2.2.1	2.3.3				
P8	Clear and accurate KPI's	Firm action if KPI's are not met					
Class		2.1.3					

Research Questions	Interviewee Code	Response	Response	Response	Response	Response	Response
Do you agree with the Leadership challenges in the V.U.C.A world and what has been your strategy or approach to overcome them? (B3)	P1	Plan the work and work the plan and the plan will work.	Execute the strategy and that is where most of them fail.				
	Class	1.2.1	3.2.2				
	P2		It is disruptive and unsettling.	Full Transparency with staff			
	Class		2.2.3	2.3.2			
	P3		When do you just stick it out.	Sustainable curve and have a long term further.	Prober subject matter foundation and ignore the newspapers. Don't get into panic station		
	Class		3.1.1	3.2.1	3.1.1		
	P4	How do you differentiate yourself.	Also, you need to adopt, your management style needs to be right.	If needed tough love through Micro management.	Know the difference on what the best way is to handle tough situations		
	Class	3.1.2	2.3.1	2.1.3	3.2.3		
	P5	Creating that safe environment for your staff.	You have to always install that certainty that everything will be ok.	Staff Understand decisions	That the change has been though through		
	Class	2.3.1	2.3.1	2.3.2	3.2.4		
	P6						
	Class						
	P7	remain relevant	be innovative	create products and services that are relevant.			
	Class	1.1.5	1.2.3	1.2.4			
P8	Safe environment	Clear Objectives	honesty and transparency				
Class	3.2.1	2.1.3	3.2.1				
In your view, what do you see the organization's approach needs to be for talent attraction, retention and growth relating to the future? (B4) Is it not better to rather outsource the best suited team at any specific time for any specific products or requirement?	P1	Change management takes time	Explain to staff, how, why, when, you need to sell it to them.	Give staff the opportunity to work through it.	Explain to the staff let them understand it	Develop the talent that you already have	people with passion
	Class	2.2.3	2.3.2	3.1.3	2.3.2	3.2.3	3.1.1
	P2	Keep best people at all cost	Invest in your good talent.	performance management	Deadwood is stopping future investment within the organization.	The good people go or are being headhunted.	Invest in the people that have same vision
	Class	3.2.1	3.2.1	2.1.3	2.1.3	3.2.1	3.2.1
	P3	You have to make it work	Create Technological space	Inhouse Training	Create tough scenario for staff to gain confidence and pride	solve the problem.	where is the person in his life
	Class	3.1.1	1.2.3	3.2.2	3.2.1	3.2.3	2.3.1
	P4		personal growth	Let the person drown and see how he can swim.	Pay, share scheme. People leaves people. Get the right mix	International experience is needed.	Get the none performers out ASAP
	Class		3.2.2	3.1.3	3.2.1	3.2.1	2.3.3
	P5	Constant recognition.	Explore outside of his comfort zone	Never stop learning		evaluate you will you keep the person interested	
	Class	3.1.3	3.1.3	3.2.2			3.2.2
	P6	Culture and word of mouth is what grows businesses.	want to work for you and that brand	better you manage your people and culture the easier it will be to retain, grow and attract the right talent.			
	Class	3.1.1	2.3.3	2.3.1			
	P7	new ways of work in the 4IR.	Reward and recognition	work/life balance.			
	Class	1.2.3	3.2.2	2.3.1			
P8	Fairness	equal opportunity					
Class		3.2.1					

Research Questions	Interviewee Code	Response	Response	Response	Response	Response	Response
What is the participant's opinion regarding contract staff versus permanent staff, and what should be the best approach? (B5)	P1	Passion and EQ is something you can't teach.	Get people that want a real future at the organisation not just a	Young eager staff members			
	Class	3.2.2	3.2.1	3.1.1			
	P2	Get the best guys to do what they are the best in.	Partner where possible.	White label your services to suit you.	Build economies of scale		
	Class	3.1.3	2.2.2	3.1.2	3.2.1		
	P3	Do contracting if (not core or short term).	Thinking and thoughts can't be contracted,	Key staff more important than company	people It is ultimately the company	deliverables can be contracted.	Contractors don't have energy
	Class	2.2.2	3.1.3	3.2.4	3.2.1	2.2.2	3.1.1
	P4	Permanent staff is part of the vision and the strategy.	Strategic jobs must be permanent	People will move, keep them committed	Plan your future	Perm part of the DNA	
	Class	3.2.1	2.3.1	3.1.3	3.2.1	2.3.3	
	P5	Contract the correct people	Set of products and solutions.	Find best fit between permanent and contractor			
	Class	2.2.2	3.1.2	2.2.2			
	P6	Invest in proper change management	Short term pain will result in long term gain.				
	Class	2.2.3	2.3.3				
P7	Culture to adaptable to change.	Permanent staff key for change	trusted to the workforce				
Class	3.1.1	2.3.3	3.2.1				
P8	Permanent staff members first.	job security					
Class	2.3.3						
How does the respondent define the culture of the organisation and what part do you think it plays within the organisation? (C1)	P1	Aspire people	Culture is a way on how staff should behave where policy and	communicate that culture	Keep them focussed and interested		
	Class	3.1.3	3.1.1	2.3.2	3.2.4		
	P2	Staff Morale					
	Class	3.1.1					
	P3	Culture	way of thinking and driving it.	Hire for character, train for skill	Do it right the first time and fix it immediately		
	Class	3.1.1	3.1.1	3.1.2	3.2.3		
	P4	Specific culture programs.	Break the barriers.	you need to trust and work with one another.	Dare: Dream big. Care and work together.	trust, Share: Skill one another,	help and lead by example
	Class	3.1.2	1.2.5	3.2.1	3.1.3	3.2.3	3.2.4
	P5	The culture has now changed.	client centric organisation.			Be more agile	lot of energy in the millennials
	Class	3.1.3	3.1.2			3.1.2	2.3.3
	P6						
	Class						
P7	big focus on culture.	Collaborative culture and focus on team					
Class	3.1.1						
P8	DNA of the organisation.						
Class	3.1.1						

Research Questions	Interviewee Code	Response	Response	Response	Response	Response	Response
What would you say are the key factors and criteria to get the correct cultural fit for the organisation? (C2)	P1	Industry is evolving quicker and quicker,	remain relevant a	keep up with the market	Use Software defines networking (Latest)		
	Class	3.2.4	1.2.4	1.2.4	1.2.3		
	P2	Customer focus	more on agility.	Sales and operations need to work more closely together	looking after your staff		
	Class	3.1.2	3.2.3	1.1.2	2.3.1		
	P3	Be Positive and avoid negative people	Collaborated team effort	Sustainable business case	Is to remain relevant	Don't be negative at work.	Add value to life by taking away problems.
	Class	3.1.1	3.1.3	3.2.1	3.2.1	3.1.1	3.2.2
	P4	Successful and Positive people	Test people in how they react in tough situations				
	Class	3.2.4	2.3.3				
	P5	About the customer	Attitude and willingness to learn	entrepreneurial spirit			
	Class	3.1.2	3.2.2	3.2.3			
	P6	People first,	Regular engagement (Socially and Work wise)	Family orientated			
	Class		3.2.1				
	P7	same goals and objectives.	A shared vision.				
	Class	3.2.1					
P8	honesty and transparency	Clear goals and					
Class	3.2.1	3.2.2					
What is the participant's opinion of culture vs. the company's vision and how does the participant see that relationship as well as in your view, what role do you see technology and innovation will play related to overcoming these cultural and change management hurdles and stumbling blocks?? (C3)	P1	people don't want to be boxed in.	Tech savvy.	technology must be user friendly	employee experience		
	Class	3.2.2	1.2.3	1.2.3	3.2.4		
	P2	Lead by example	Innovation hub	Pockets in the business.	Partner better, Partner and stay relevant		
	Class	3.1.1	2.1.2	1.2.5	2.2.2		
	P3	Not that much, We run a very complex factory					
	Class	2.1.2					
	P4	culture not as important in certain countries	understand the picture or objective they start buying into it.	Performance management			
	Class	3.2.2	3.2.1	2.1.3			
	P5	Doing thing differently,	Automate. Higher margin = Lower cost. Benefitting the customer	Lowering Cost and Maximizing profit,	moving workload to low cost geographies,	stay relevant.	
	Class	3.1.3	3.1.2	3.2.4	1.1.5	1.2.4	
	P6	Technology is putting more strain and pressure on people.	Managing the balance	Outcome-based management style.	Objectives clear	delivery against the objective	empower them.
	Class	1.2.3		2.1.3	2.3.3		
	P7	Technology and innovation(4IR)	share skills and knowledge.	part KPI	critical thinking	problem solving, and innovation is essential.	transformational leaders are required to influence positive change
	Class	1.2.3	3.1.3		3.2.3	3.2.3	3.1.1
P8	common ground	basics in place,	Trust, respect, transparency and honesty				
Class		3.1.3	3.2.1				