

Investigating the readiness to accept the implementation of new business processes in the support service industry

CE Lloyd



orcid.org 0000-0001-6784-1160

Mini-dissertation accepted in partial fulfilment of the
requirements for the degree *Master in Business Administration*
at the North-West University

Supervisor: Prof N Mouton

Graduation: June 2021

Student number: 10729968

PREFACE AND ACKNOWLEDGEMENTS

Two years ago, I started this journey, twenty-three years after the completion of my undergraduate studies, encouraged by a dear friend and not sure at all if I would survive the MBA. I was totally unprepared for the experience and knowledge that I gained through my studies. It was two years of hard work but I would recommend it to everybody.

First and foremost, I would like to thank my Heavenly Father for providing me with strength and courage during the past two years. Thank you to my family and especially my husband who supported me unconditionally and patiently. Thank you to my MBA group “Something”, especially Theresa. I found a friend in you for life, without you I would not have made it. Thank you to Prof. Nelda Mouton, my supervisor, for your patience and dedication to each of your students. With your heavy workload this past year, you were still patient and always available. Please know that it does not go unnoticed, we do appreciate you.

To the lecturers and admin personnel of the NWU Business School, thank you for guiding us during the past two years. It was a privilege to be a student at the NWU Business School.

ABSTRACT

This study aimed to explore the importance and necessity of change management in ensuring the successful implementation and management of business processes. Firstly, processes in organisations, otherwise referred to as **business processes**, were investigated. The general misunderstanding is that business processes are like a recipe; once developed and implemented they must be followed and never changed. However, this misconception might be a relevant contributor to employees' general resistance to change, as they often wonder "Why change something that works?"

The key factors or enablers necessary for the readiness to change were identified through an extensive literature review and data were collected using a questionnaire with close-ended answers. The questionnaires were completed by personnel working in the support service industry within a unit of a higher education institution.

This study may provide some insight to organisations and managers who are faced with change issues daily. It is hoped that it will also provide a better understanding to organisations of the importance of change management to ensure the successful implementation or modification of business processes.

Key terms: **Business processes, business process management, process implementation, process enablers, enterprise capabilities, readiness to change, change management, change management models, climate of change, quantitative research.**

LIST OF ABBREVIATIONS AND KEY TERMS

Business process management refers to a consolidation of disciplines; authors claim “that a process-centred approach leads to substantial improvements in both performance and compliance of a system” (Vom Brocke & Rosemann, 2015:ix).

Organisational culture refers to general ideas, traditions and rules that regulate the relationship between employees.

Quality Management System refers to a set of policies and procedures which manage the processes of an organisation.

Readiness to change can be defined as the employees’ willingness and ability to change.

Table 1-1: List of abbreviations

Abbreviation	Meaning
BOC	Bureaucratic Organisational Culture
BPM	Business Process Management
CEd	Continuous Education
DVC: T-L	Deputy Vice-Chancellor: Teaching and Learning
HEI	Higher Education Institute
IOC	Innovative Organisational Culture
IT	Information Technology
PDCA	Plan Do Check Act
PEMM	Process and Enterprise Maturity Model
PQM	Programme Qualification Mix
OCQ-C, P, R	Organisational Change Questionnaire-Climate of Change, Processes and Readiness
QMS	Quality Management System
SPSS	Statistical Package for the Social Sciences
TOC	Trust and Supportive Organisational Culture
UMC	University Management Committee

TABLE OF CONTENTS

PREFACE AND ACKNOWLEDGEMENTS	I
ABSTRACT.....	II
LIST OF ABBREVIATIONS AND KEY TERMS	III
CHAPTER 1: BACKGROUND TO THE STUDY	1
1.1 Introduction	1
1.2 Problem statement.....	1
1.3 Research aim and objectives of the study	2
1.4 Importance of the study	2
1.5 Limitations and assumptions of the study	2
1.6 Research methodology	3
1.6.1 Design	3
1.6.2 Population/sampling.....	4
1.6.3 Data collection.....	4
1.6.4 Data analysis.....	4
1.7 Layout of the study	4
CHAPTER 2: OVERVIEW OF BUSINESS PROCESS MANAGEMENT	5
2.1 Introduction	5
2.2 Business Process Management (BPM).....	5
2.3 Process maturity	7
2.3.1 Process enablers	8
2.3.2 Enterprise capabilities	8

2.4	BPM-supportive business culture	9
2.5	Summary	13
CHAPTER 3: ORGANISATIONAL CHANGE AND THE READINESS TO CHANGE		14
3.1	Introduction	14
3.2	The basic assumptions surrounding organisation types	16
3.3	Organisational change	17
3.4	Change management models	18
3.4.1	Lewin's change management model.....	19
3.4.2	Kotter's theory	21
3.4.3	Bullock and Batten's phases of planned change	22
3.5	Climate of change	23
3.6	Readiness for change.....	27
3.7	Summary	28
CHAPTER 4: EMPIRICAL STUDY		30
4.1	Introduction	30
4.2	Population.....	30
4.2.1	Objectives of the unit.....	30
4.2.2	Positioning and operating structure.....	31
4.3	Gathering of data	34
4.4	Reliability and validity	35
4.5	Method of analysis.....	37
CHAPTER 5: DATA ANALYSIS AND DISCUSSION		38

5.1	Introduction	38
5.2	Data analysis	42
5.2.1	Analysis of Process of change	42
5.2.2	Analysis of Climate of change	44
5.2.3	Analysis of Readiness to change	44
5.3	Summary	45
 CHAPTER 6: INTERPRETATIONS, RECOMMENDATIONS AND CONCLUDING		
	REMARKS	46
6.1	Introduction	46
6.2	Process of change	46
6.3	Climate of change	46
6.4	Readiness to change	47
6.5	Limitations and future research	47
6.5.1	Population	47
6.5.2	Time limitations and survey.....	47
6.6	Recommendation for further research.....	47
 REFERENCE LIST		49
 APPENDICES		53
Appendix A		54
Appendix B		56
Appendix C		60

LIST OF TABLES

Table 1-1:	List of abbreviations.....	iii
Table 2-1:	A summary of organisational cultures (WU <i>et al.</i> ,2019)	11
Table 2-2:	Values specifying the BPM culture concept (Schmiedel <i>et al.</i> , 2019)	12
Table 3-1:	Models of change and their associated metaphors (Cameron & Green, 2019)	19
Table 3-2:	Leadership of change phase-by-phase, comparing inner and outer leadership requirements (Cameron & Green, 2019)	26
Table 3-3:	Comparison of important characteristics of change models, change management and change readiness.	28
Table 4-1:	Age of the participants.....	33
Table 4-2:	Gender of the participants	34
Table 4-3:	Section of the unit in which participants work.....	34
Table 4-4:	Cronbach's alpha for questionnaire combined	36
Table 4-5:	Cronbach's alpha inter-item correlation: Process of change	36
Table 4-6:	Cronbach's alpha inter-item correlation: Climate of change.....	36
Table 4-7:	Cronbach's alpha inter-item correlation: Readiness for change.....	36
Table 5-1:	Summary of questionnaire distributed	38
Table 5-2:	Analysis of questionnaire – all questions combined.....	39
Table 5-3:	Analysis of the dimension: Process of change	43
Table 5-4:	Analysis for the dimension: Climate of change.....	44
Table 5-5:	Analysis for the dimension: Readiness to change	45

LIST OF FIGURES

Figure 1-1:	The major difference between exploratory and conclusive research design (Dudovskiy, 2018)	3
Figure 2-1:	A typical BPM cycle as described by Vom Brocke and Rosemann (Vom Brocke & Rosemann, 2015)	6
Figure 2-2:	The BPM capability framework (de Bruin & Rosemann, 2007)	7
Figure 3-1:	Critical failure factors (Momoh <i>et al.</i> , 2010)	15
Figure 3-2:	Lewin's change model	20
Figure 3-3:	Lewin's force field analysis	20
Figure 3-4:	Kotter's eight-step model (Cameron & Green, 2019)	22
Figure 3-5:	Three dimensions of leadership (Cameron & Green, 2019)	24
Figure 4-1:	The position of the unit in the HEI	31
Figure 4-2:	Organisational structure of the unit under study	32
Figure 4-3:	Classification of climate dimensions (Bouckennooghe <i>et al.</i> , 2009)	34

CHAPTER 1: BACKGROUND TO THE STUDY

1.1 Introduction

“To improve is to change, to be perfect is to change often.” – Winston Churchill

Every business goes through phases or life cycles and needs to change regularly to keep up with technology, customer demands and continuous growth. Businesses, therefore, need to function optimally in order to gain maximum profit and remain viable. To do so, many companies implement new processes to improve the way they operate (Rizoto-Vidala-Pesoa & Kuzņecova, 2017).

In this fast-changing world, especially with regular technological developments, organisations need to modify themselves constantly as the success of an organisation largely depends on its ability to adapt and cope with the constant change (Hashem, 2019). Business processes must change more frequently than in the past to keep up with customer demands regarding communication and production. Unfortunately, these changes to processes are often met with resistance from employees. This resistance can be due to the lack of communication, technical skills or organisational maturity.

According to Bouckennooghe (2010), as cited in the journal *Linking perceived management support with employees* (Kirrane *et al.*, 2017), readiness for change refers to the positive or negative way employees perceive the change. It is an emotional element and a critical factor in the success of process implementation.

This chapter provides background information on the rationale of the study, the research design and the methodology used. The literature review for this study is divided into two chapters. The first chapter provides an understanding of the importance of Business Process Management (BPM) in the support service industry and investigates the organisational enablers that are vital to the successful implementation or adaption of business processes. The second chapter provides an understanding of the process of change, the climate of change and the readiness to change.

1.2 Problem statement

Most successful executives believe that the regular evaluation and redesigning of business processes will lead to the improvement of the organisation's performance, especially in this rapidly changing business environment (Hammer, 2007). Therefore, when executives in organisations have a vision for their organisation which will require a certain amount of change

in their business processes, they are often dumbfounded when they experience resistance from their staff. They cannot understand why employees refuse to see the benefits that the change will bring to the organisation. Implementing and managing new business processes will therefore only be as effective as the support it receives from the employees.

To investigate the readiness for change and the importance of the readiness for change attitude, this study first needs to focus on the importance of the constant management and adaption of business processes. It will also discuss the vital factors influencing the success of the implementation or modification of these processes.

1.3 Research aim and objectives of the study

This study aims to investigate the readiness of employees in a support service unit of a Higher Education Institute (HEI). The following research objectives will aid in the achievement of this aim:

1. The importance of business processes in an organisation;
2. The importance of BPM;
3. The relationship between BPM and readiness to change; and
4. The effect of a BPM-supportive culture on readiness to change.

1.4 Importance of the study

The HEI unit under study has recently undergone restructuring. This unit had no clear and consistent systems and processes in place. A Quality Management System (QMS) has been developed and approved by management, detailing all processes and procedures necessary to ensure efficiency and quality service delivery. The findings in this study therefore have the potential to assist management in the successful implementation of the newly developed QMS with minimal resistance from the employees.

1.5 Limitations and assumptions of the study

This research is limited to a specific support service unit in an HEI which consists of 31 employees. This is a relatively small sample size and may not adequately represent the target population. Research studies with small sample sizes run the risk of not gathering enough data to support expectations; using a larger sample size can therefore generate more accurate results.

The identification of the correct processes for the organisation is a study on its own. Therefore, this study assumes that the organisation already identified the most suitable business process during the development of the QMS.

1.6 Research methodology

This multimethod study is empirical in nature. Empirical research begins with a literature review and includes the collection of data. For this study, the data is collected via a quantitative research approach as quantitative research studies variables with the primary role of testing hypotheses. The variables can be measured using statistical procedures and instruments to analyse the numbered data (Creswell, 2018). A hypothesis can then be tested and is a statement about the relationship between two or more variables (Struwig *et al.*, 2001).

1.6.1 Design

Although the research design has most of the qualities of a conclusive design (with structured questions, quantitative data analysis and a specific purpose), the small sample size may influence the accuracy of the results. This may change the design to exploratory. Exploratory research provides the reader with a better understanding of the problem and provides a range of options for possible solutions to a specific problem (Sandhusen, 2000). Figure 1.1 illustrates the major differences between an exploratory and a conclusive research design.

Research project components	Exploratory research	Conclusive research
Research purpose	General: to generate insights about a situation	Specific: to verify insights and aid in selecting a course of action
Data needs	Vague	Clear
Data sources	Ill defined	Well defined
Data collection form	Open-ended, rough	Usually structured
Sample	Relatively small; subjectively selected to maximize generalization of insights	Relatively large; objectively selected to permit generalization of findings
Data collection	Flexible; no set procedure	Rigid: well-laid-out procedure
Data analysis	Informal; typically non-quantitative	Format; typically quantitative
Inferences/Recommendations	More tentative than final	More final than tentative

Figure 1-1: The major difference between exploratory and conclusive research design (Dudovski, 2018)

1.6.2 Population/sampling

The population of the participants in this study consists of a select group of 35 support personnel in the operations management segment of a unit within an HEI in South Africa. These personnel are based in three sites within the HEI. The HEI established this unit in order to support faculties with the coordination and administration of all non-formal academic programmes that are not listed on the University Programme Qualification Mix (PQM) as formal programmes. These programmes may include short courses, workshops and short learning programmes.

1.6.3 Data collection

Data will be collected from an electronically distributed questionnaire with closed-ended questions. The questionnaire is completed voluntarily and anonymously by the participants in the sample group. Each participant will provide consent by selecting the “agree” button on the electronic form. If the participant selects the “do not agree” button, the questionnaire ends immediately without collecting any data.

1.6.4 Data analysis

The purpose of the data analysis is to establish if the unit is ready to accept the implementation of new business processes. After data collection, the data will be converted into a suitable format, coded and transformed into information by using SPSS (the Statistical Package for the Social Sciences).

1.7 Layout of the study

This study consists of six chapters. Chapter One has provided the background to this study and discussed the research aim and objectives, the scope of the study, described the research methodology and the layout of the study.

The Literature review is divided into Chapter Two and Three. Chapter Two focusses on BPM and process implementation in the service industry. Chapter Three discusses organisational change management, the different change management models and the readiness for change.

Chapter Four discusses the research methodology followed, the method of data collection and provides more information on the population studied. Chapter Five provides an analysis of the data and finally, Chapter Six provides the discussions and recommendations regarding the analysis whilst concluding the study.

CHAPTER 2: OVERVIEW OF BUSINESS PROCESS MANAGEMENT

2.1 Introduction

The concept of business processes is not new in the production industry and it is widely accepted as vital to any production organisation. Davenport (1993:11) defines a process as “a specific ordering of work activities across time and place, with a beginning and end and clearly identified inputs and outputs” (Davenport, 1993:11). Nordsieck (cited in Schallmo *et al.*, 2018:14), states that “Business, in reality, is a constant process, a continuous value-creating chain” (Nordsieck, 1932).

All organisations have specific processes. These, however, can merely be seen as habits in the organisation and will not reap the same benefits as a business process. When designing a business process, the organisation should focus on “end-to-end processes that transcend organisational boundaries” (Vom Brocke & Rosemann, 2015:7). Processes ensure operational benefits such as consistency, lowering of operational costs, improvement and consistency of quality and customer satisfaction.

This chapter will investigate business processes and the management thereof. These are considered as enablers of readiness to change.

2.2 Business Process Management (BPM)

Generally, the public considers BPM as similar to Information Technology (IT). IT, however, is just one aspect of BPM. The latter refers to a consolidation of disciplines and is roughly defined as “a process-centred approach that leads to substantial improvements in both performance and compliance of a system” (Vom Brocke & Rosemann, 2015:ix). Vom Brocke and Rosemann. (2015) believe that although the manufacturing sector has understood the importance of processes for a long time, these processes were only recognised in the service industry more recently.

Organisations spend vast amounts of time and money on researching and developing the most suitable process to implement. After the process has been identified and successfully implemented, assuming that there is no resistance to the implementation process, the organisation will soon reap the rewards. If, however, the organisation does not constantly evaluate and improve their processes, this will only be a short-term solution. The continuing success of the process depends on the continuous management thereof and it should be measured using targets. These targets can be based on customer or enterprise needs. As soon as the targets are not met, the problem should be identified and the process should be

re-evaluated and refined appropriately. Therefore, BPM is a continuous cycle, as clearly shown in Figure 2.1.

The cycle in Figure 2.1 is based on Deming's (2000) PDCA (Plan Do Check Act) cycle. The cycle starts from the bottom where the process is **designed**. It then moves left where performance targets should be identified. In this figure, the criteria used to determine the targets are **customer needs** and **benchmark competitors**. If the targets are not met, the **source of the problem** needs to be identified. As soon as the problem is identified, an **intervention plan** needs to be developed. In order to improve the process, the design needs to be **modified or replaced**. The results are measured again and the cycle starts from the anew. This continuous cycle leads to process maturity.

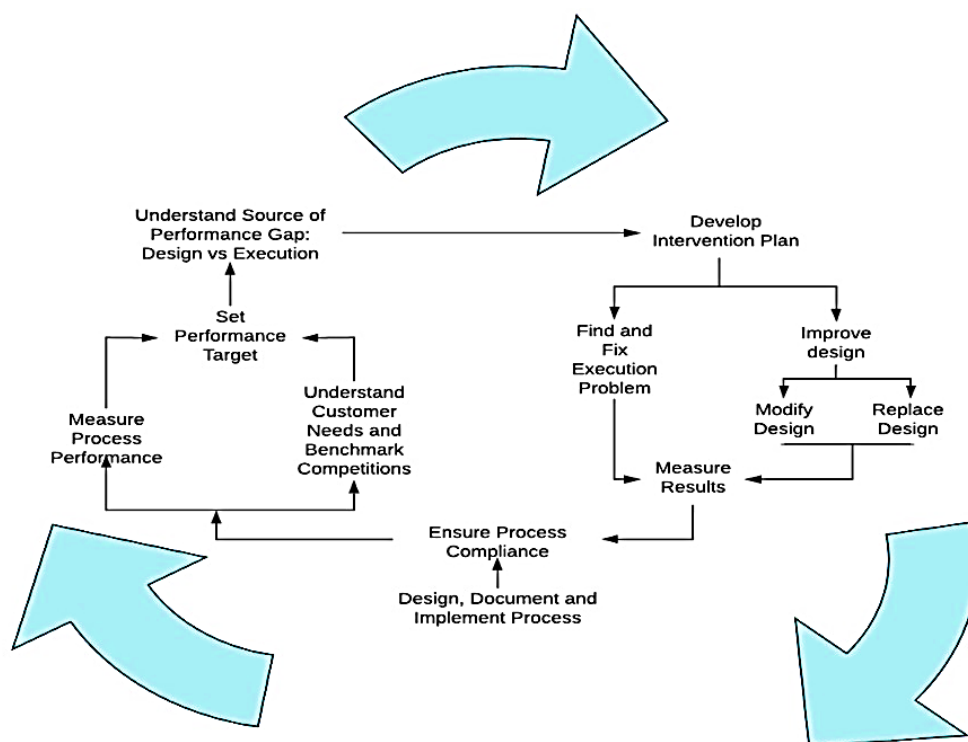


Figure 2-1: A typical BPM cycle as described by Vom Brocke and Rosemann (Vom Brocke & Rosemann, 2015)

Rummler and Ramias (Vom Brocke & Rosemann, 2015), identified six core elements that are critical to the success of BPM. These elements are:

- **Strategic alignment;** defined as a tight link between the priorities and processes of a company.
- **Governance;** there should be a high level of transparency and accountability regarding the responsibilities of each level of the processes.

- In the context of BPM, **methods** are all the tools that are used throughout the entire process.
- The **IT component** of any modern business process is of great value, but it can be overwhelming, especially during this rapid development phase where new programs are developed daily.
- Any process needs **people that are willing and able** to manage and continually improve it.
- The importance of culture was recognised recently. Specific values must be present for BPM to succeed. This can be referred to as the **BPM-supportive business culture**.

Several authors investigated the development of certain capabilities structured around the core elements of BPM as mentioned above. These capabilities are structured in a capability framework as seen in Figure 2.2, which was proposed by de Bruin and Rosemann (2007). It is essential in creating process orientation in organisations (Kerpedzhiev *et al.*, 2020).

Strategic Alignment	Governance	Methods	Information Technology	People	Culture
Process Improvement Planning	Process Management Decision-Making	Process Design & Modeling	Process Design & Modeling	Process Skills & Expertise	Responsiveness to Process Change
Strategy & Process Capability Linkage	Process Roles and Responsibilities	Process Implementation & Execution	Process Implementation & Execution	Process Management Knowledge	Process Values & Beliefs
Enterprise Process Architecture	Process Metrics & Performance Linkage	Process Monitoring & Control	Process Monitoring & Control	Process Education	Process Attitudes & Behaviors
Process Measures	Process-Related Standards	Process Improvement & Innovation	Process Improvement & Innovation	Process Collaboration	Leadership Attention to Process
Process Customer & Stakeholders	Process Management Compliance	Process Program & Project Management	Process Program & Project Management	Process Management Leaders	Process Management Social Networks

Figure 2-2: The BPM capability framework (de Bruin & Rosemann, 2007)

2.3 Process maturity

Process maturity entails the constant and systematic improvement of business processes and skills and is measured by the extent of the definition, measurement, management, control and effectiveness of the processes (Kucińska-Landwójtowicz, 2019). Hammer's 2007 article *The Process Audit* (as cited by Vom Brocke & Rosemann, 2015), identified two groups of characteristics needed for business processes to perform well and to keep performing well. He referred to these groups as *process enablers* and *enterprise capabilities*. These groups create

a framework that Hammer uses in his Process and Enterprise Maturity Model (PEMM). Hammer created this framework as provided in Addendum A, as an evaluation tool that any organisation can use to evaluate the maturity of their process as well as the receptiveness from the organisation.

2.3.1 Process enablers

These enablers refer to individual processes and are mutually interdependent. Weakness or absence of one will lead to ineffectiveness of the other. An organisation can, for instance, design the perfect process but if the process owner does not have the authority to enforce the process, failure is imminent. The process enablers are described below.

- **Design:** The process needs to be designed in such a way that there are precise specifications on the different aspects of the process and the way the process should be executed. Employees need to know who takes responsibility for which tasks in the process.
- **Performers:** The employees who will execute the process need to be skilled or trained, to be capable of following the process.
- **Owner:** An employee, preferably a senior executive, needs to be allocated to take responsibility or ownership of the business process.
- **Infrastructure:** The organisation's infrastructure, for instance, IT and human resources, needs to be familiar with the process in order to provide support.
- **Metrics:** The organisation needs to identify specific targets that need to be kept. As soon as these targets are not kept, the organisation will know that a problem exists within the process.

2.3.2 Enterprise capabilities

Enterprise capabilities can also be described as organisational enablers. Organisations need to provide a supportive environment that enables the development of high-performance processes. Designing or redesigning of business processes means large-scale organisational change and these capabilities are vital to ensure successful implementation.

- **Leadership:** The senior executives of the organisation need to be committed to the development and implementation of the process.

- **Culture:** Employees need to develop a culture where the focus falls on customer value and wherein they are willing to change and work in teams. This culture is also referred to later in this study as a BPM-supportive organisational culture.
- **Expertise:** The organisation needs an expert with the skills to design and redesign the most suitable process.
- **Governance:** The organisation needs to implement mechanisms that will enable employees to manage complex projects.

Hammer's (2007) PEMM framework differs from other models in the sense that it identifies characteristics that a process and organisation should have to successfully implement high-performance processes, rather than specific features of processes. Hammer states that stronger capabilities within an organisation will ensure better performance in processes. PEMM can be applied to any organisation in any industry, as it is a simplistic model that can be easily applied. This model also makes use of targets to identify problems in a process as soon as possible.

Hammer (2007), as well as Rummler and Ramias, refer to the importance of the willingness and ability of staff in process design or redesign. This organisational culture can be described as a BPM culture, or BPM-supportive culture, as stated above.

2.4 BPM-supportive business culture

Literature emphasises the importance and effectiveness of BPM. In the end, it does not matter what techniques organisations use to implement or improve these processes, they will not succeed without the cooperation of their employees.

Where social culture evaluates the norms and acceptability of behaviours, business or organisational culture evaluates and regulates the acceptability of behaviours within the organisation. The term 'organisational culture' refers to general ideas, traditions and rules that regulate the relationship between employees. A positive organisational culture is what brings employees together as a team and it is the reason why they support each other, whereas a favourable business culture affects the operations of an organisation positively and plays a big part in its success. Business cultures combine the organisation's values with the employees' personal values (Dinçer *et al.*, 2018).

Organisational culture is defined by Edgar Schein in his book *Organisational Culture and Leadership* (Schein, 2010) (cited by Wu *et al.*, 2019) as an invisible yet powerful 'social force' that drives the direction of the organisation. Three main types of organisational cultures have

been identified in the past and are used widely in the analyses of organisational cultures. These are Innovative Organisational Culture (IOC), Bureaucratic Organisational Culture (BOC) and Trust and Supportive Organisational Culture (TOC).

With IOC, the emphasis is on creativity and opportunities which encourage employees to investigate new ways to do their work (Hogan & Coote, 2014). BOC is more hierarchical, with clear responsibilities; it focuses more on structure, rules and regulations. This type of culture involves centralisation and consistency, predictability and efficiency (Jie *et al.*, 2017). TOC focuses on teamwork, support and building trusting relationships with employees within the organisational setting (Ismail *et al.*, 2020). Table 2.1 provides a summary of the organisational cultures as described in the extensive research performed by Wu *et al.* (2019).

Table 2-1: A summary of organisational cultures (WU *et al.*,2019)

Three types	Four types	Content (value)	Definition	Rationale	Citations
Innovative organizational culture (IOC)		Opportunity seeking, openness and flexibility	The degree to which an organization's values encourage employees to provide new ideas, a flexible approach to solving problems and test new things	Encourages employees' intrinsic interest in, and appreciation of novelty, promotes variety-seeking new ideas or advantage-seeking (e.g. new market) Welcomes divergent thinking that enables problem identity and solution searching	Wallach (1983), Odom <i>et al.</i> (1990), Ireland <i>et al.</i> (2003), Uzokurt <i>et al.</i> (2013), Hogan and Coote (2014), West and Bogers (2017)
		Risk-taking	The degree to which an organization's values encourage employees to adventurous	Values risk-taking or taking meaningful risks within the scope of one's job Employees have a sense of being and are free to try new ideas without fear of negative consequences	Wallach (1983), Odom <i>et al.</i> (1990), O'Reilly <i>et al.</i> (1991), Tsui <i>et al.</i> (2006), Berson <i>et al.</i> (2008), Tellis <i>et al.</i> (2009), Uzokurt <i>et al.</i> (2013), Hogan and Coote (2014)
	A developmental culture (i.e. open systems model or the adhocracy culture)	Flexibility and external	The degree to which an organization's structure has flexibility and change; toward an external, organization-oriented emphasis	The development culture emphasizes flexibility and change, but maintains a focus on the external environment, acquiring additional resources, legitimacy and external support	Quinn and Rohrbaugh (1983), Denison and Spreitzer (1991), Cameron and Quinn (2011), Uzokurt <i>et al.</i> (2013)
Bureaucratic organizational culture (BOC)	A rational culture (i.e. rational goal model or the market culture)	Control and internal	The degree to which an organization's structure is stability and control; toward an external, organization-oriented emphasis	The rational culture emphasizes performance and goal achievement also the pursuit of well-defined objectives	Quinn and Rohrbaugh (1983), Denison and Spreitzer (1991), Cameron and Quinn (2011), Uzokurt <i>et al.</i> (2013)
		Responsibility and authority	The degree to which an organization's autonomy and responsibility for their work The degree to which an organization's flexibility and emphasizes formalization and centralization along with an emphasis on efficient	Clear lines of responsibility and authority and work are organized and systematic These cultures are usually based on control and power	Wallach (1983), Odom <i>et al.</i> (1990), Berson <i>et al.</i> (2008), Hogan and Coote (2014)
	A hierarchical culture (i.e. internal process model)	Hierarchical and compartmentalized; control and internal orientation	The degree of which an organization is power-oriented cautious, established, solid, regulated, ordered, structured, procedural and hierarchical The degree to which an organization embodies work environments that are characterized by trust and safety The degree to which an organization values coordinate and strong teamwork	Organizations tend to be stable, careful and usually mature A strong bureaucratic culture is not likely to attract and retain creative or ambitious people Work environment is characterized by trust and safety which lead to an encouraging and collaborative atmosphere	Wallach (1983), Quinn and Rohrbaugh (1983), Odom <i>et al.</i> (1990), Denison and Spreitzer (1991), Cameron and Quinn (2011), Berson <i>et al.</i> (2008), Uzokurt <i>et al.</i> (2013) O'Reilly <i>et al.</i> (1991), Berson <i>et al.</i> (2008), Balliet <i>et al.</i> (2013)
Trust and support organizational culture (TOC)		Trust and safety	The degree to which an organization values coordinate and strong teamwork	High levels of integration and information-sharing among departments or teams. Teamwork is a core value	Wallach (1983), Odom <i>et al.</i> (1990), O'Reilly <i>et al.</i> (1991), Berson <i>et al.</i> (2008), Hogan and Coote (2014)
	A group culture (i.e. human relations model or the clan culture)	Flexibility and internal orientation	The degree to which an organization's structure is flexibility and focuses on internal organization	The group culture is concerned with human relations. Belonging, trust and participation are core values of members	Quinn and Rohrbaugh (1983), Denison and Spreitzer (1991), Cameron and Quinn (2011), Uzokurt <i>et al.</i> (2013)

Summarily, a BPM-supportive business culture is an organisational culture which supports and embraces the achievement of BPM (Schmiedel *et al.*, 2019). A study conducted by Schmiedel *et al.* (2019) found that a BPM culture, together with the method of implementation of a new business process, enhances the performance of the process. These authors identify several values that are important in a BPM culture, as can be seen in Table 2.2.

Table 2-2: Values specifying the BPM culture concept (Schmiedel *et al.*, 2019)

Value	Customer orientation	Excellence	Responsibility	Teamwork
Sub-dimensions	The proactive and responsive attitude toward the needs of process output recipients; external customer orientation; and internal customer orientation	The orientation towards continuous improvement and innovation to achieve superior process performance; continuous process improvement; and process innovation	The commitment to process objectives and the accountability for process decisions; accountability for process objectives; and commitment to process objectives.	The positive attitude toward cross-functional collaboration; formal cross-functional teamwork; and informal cross-functional teamwork.

The BPM culture values **customer satisfaction** (not only external customers but also internal ‘customers’ or employees) in the process. The value of **excellence** refers to quality and sustainability. Employees with a BPM culture will perform a task as well as possible while also gaining insight into the process. Understanding the process and realising why every employee’s task is essential falls under the values of **teamwork** and **responsibility**. Employees need to feel that their task is meaningful and that they are appreciated for the roles which they play.

Schmiedal *et al.*’s (2019) most pertinent finding in relation to this study, however, was that applying BPM methods contributes to the establishment of an organisational culture that supports BPM. This, in turn, has a positive influence on process performance and creates an understanding of the necessity of constant change in business processes.

2.5 Summary

This chapter established that the implementation of business processes is essential to the success of the organisation. Further, these processes are not a stagnant process but rather a continuous process of evaluation, redesigning, improvement and implementation. This continuous process ensures that the organisation keeps up with the constant changes in the market, customer needs and technological development. Constant change in processes can be disruptive for the organisation and resistance from the employees is imminent unless the organisation has a BPM-supportive business culture. The essential aspect of a BPM-supportive business culture is the support and acceptance of change from the employees in the organisation. Therefore, it can be assumed that a BPM-supportive culture will contribute positively towards readiness for change, which will be discussed in the next chapter.

CHAPTER 3: ORGANISATIONAL CHANGE AND THE READINESS TO CHANGE

3.1 Introduction

“It is not the strongest species that survive, nor the most intelligent, but the most responsive to change.” – Charles Darwin

To understand the process of organisational change, one first needs to understand the impact of change on individuals. From the moment that you are born, routine is an essential element in your sense of security. In the study done by Gatenio-Kalush and Cohen (2019), routine is mentioned as a strategy for emotional regulation. Therefore, it is no surprise that even in adulthood, routine creates the perception of security. The moment that something changes externally, individuals experience an internal reaction, whether it be positive or negative. Individuals consciously or subconsciously associate change with learning something new and a job that they usually performed automatically, now provides new challenges which makes them nervous and anxious. In the beginning, the change may cause employees to be less efficient as they need more time to master the new process or program and they can fear that they will appear incompetent, which will further increase their anxiousness (Cameron & Green, 2019). Change can be observed as a threat to the sense of security of an individual. It is vital to consider the impact that the change in an organisation will have on the employees; after all, their attitude will determine if the change is successful. Momoh, Roy and Shehab (Momoh *et al.*, 2010) studied the reasons for failure in implementing enterprise resource planning. They found that the lack of change management was one of the biggest culprits, as displayed in Figure 3.1

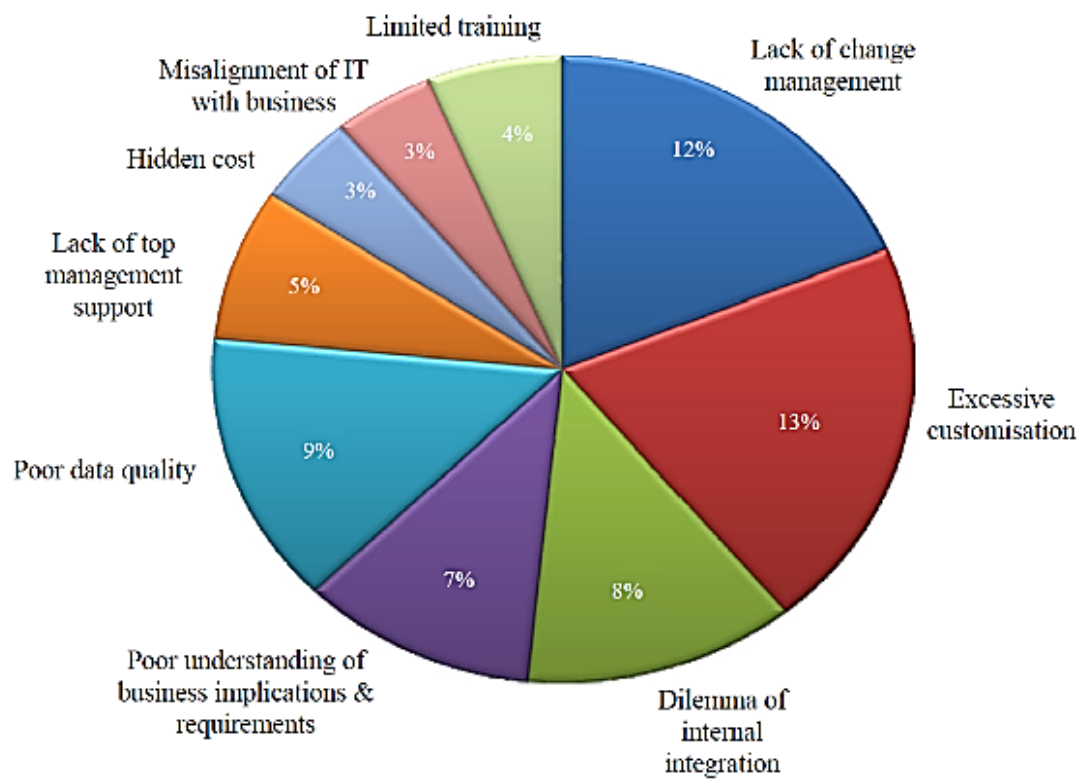


Figure 3-1: Critical failure factors (Momoh et al., 2010)

Considering the above, this chapter will focus on the literature review of readiness for change. Firstly, it will provide a background to and review of the basic assumptions surrounding the different types of organisations and the definition of organisational change. Thereafter, the different models of change will be discussed to determine what the literature and previous research consider as the essential elements that need to be present to ensure the successful implementation of change. This chapter also aims to provide background and information about the dimensions and their sub-dimensions that are evaluated within the questionnaire, as set up by the researcher. These dimensions include:

1. **Process of change:** The way change is dealt with in the organisation, specifically towards the quality of communication, participation, the attitude of top management towards change and the support provided by supervisors.
2. **Climate of change:** The internal circumstances in the organisation with a specific focus on trust in leadership, politicking and cohesion.
3. **Readiness for change:** The employees' emotional, cognitive and intentional readiness to accept change.

3.2 The basic assumptions surrounding organisation types

To properly understand the process of organisational change, it is useful to first examine the basic assumptions surrounding the understanding of what an organisation is and what the assumptions in each type of organisation are regarding change. Morgan Jr *et al.* (1986) refer to eight metaphors when describing the different beliefs about how the organisation works. These metaphors are machines, organisms, brains, culture, political systems, psychic prisons, flux and transformation and instruments of domination. Of these, the four metaphors that are most commonly used by managers are machines, political systems, organisms and flux and transformation.

The organisation as a machine refers to functional areas such as routine, job roles and defined structures. This metaphor implies that organisations are run as if they were machines with specific parts (roles) and control (authority) from one central point. Like a well-oiled machine, this metaphor can work, as long as the situation is stable. Instability such as change will need strong management and control from the top down. It requires the change to be implemented by a person of authority; however, resistance is expected and needs to be managed and well-controlled.

The organisation as a political system refers to typical political games in an organisation and can also be referred to as “power in action” (Buchanan & Badham, 2020:2). When describing an organisation as a political system, the phrases democracy, autocracy and anarchy are often used. This system recognises the effect that power-play and conflict (due to competing interests) have on an organisation. This system relies on coalitions between individuals, building support for beliefs, bargaining and a clear distinction between ‘winners and losers’. When looking at change in this metaphor, it is assumed that change needs support from a powerful person before it can succeed. Thus, strategies used to implement change include renegotiation and the creation of coalitions.

The organisation as an organism is seen as a living and adaptive system where the focus is on the environment of the organisation and the ability to intermingle with that environment (PISTOL, 2020). It is a more open system and the essential elements of this metaphor are health and happiness of the individual, groups and the organisation. This metaphor supports change but only in response to change in the external environment, which is accompanied by psychological support.

The organisation as flux and transformation supports not only change in response to the environment but suggests that the environment and organisation respond to and affect each other. This metaphor supports the idea of testing on a small scale and learning before the

implementation of change. It sees the organisation as part of the 'ebb and flow' of the environment but still acknowledges the capacity of an organisation to organise, renew and change. According to this metaphor, during change managers are part of the environment and do not manage from outside the system but rather act as enablers.

Morgan Jr *et al.* (1986) state that having a deeper understanding of how organisations can be perceived can help management identify strengths and weaknesses. This will challenge management to handle complex situations, such as organisational change, with a different way of thinking.

3.3 Organisational change

Zorn *et al.* (1999) define organisational change as "any alteration or modification of organisational structures or processes" (Lewis & Sahay, 2019:29). Referring back to BPM as discussed earlier in this study, the essence of BPM is to embrace and accept constant change in processes for the sake of the growth and prosperity of the organisation.

Lewis and Sahay (2019) describe three ways to differentiate organisational change. Firstly, they distinguish between planned and unplanned changes, where planned changes take place when operations managers implement changes in processes to ensure the optimal functioning of the organisation. Unplanned change is often necessary with the occurrence of environmental forces or situations that are not in the control of the organisation, such as government legislation. A second way of describing organisational change is in the description of the change in objects or categories, like processes, policies, technology, programs and personnel. A third way that they suggest concerns the scope and size of change, of which there are three types. First-order change refers to small and predictable change. Second-order change questions the key organisational assumptions and usually refers to a significant change from the previous practice. Finally, third-order change signifies the preparation of continuous change in the organisation.

Before looking at the range of models to organisational change, it is valuable to consider the four key approaches to individual change. These approaches are the behavioural approach, the cognitive approach, the psychodynamic approach and the humanistic psychology approach.

The behavioural approach implies that the behaviours of others can be changed through reward and punishment. This approach supports the theory developed in 1957, McGregor's Theory X, which assumes people are self-centred and will resist change unless they are persuaded by being rewarded or punished (Grigorov, 2020).

The cognitive approach is based on the assumption that a person's way of thinking is the main reason for their emotions and problems. This is based on self-conditioning and positive reframing to achieve results and focusses more on building positive attitudes and outcomes.

The psychodynamic approach focus on the psychological process that people go through during change. Kubler-Ross identified five stages that people go through in her publication *On Death and Dying* in 1969 (Corr, 2020). These stages are denial, anger, bargaining, depression and acceptance. This approach will assist organisations in understanding the reactions of their employees during the process of change.

The humanistic psychology approach focuses on and believes in healthy development and growth to achieve optimal potential. This approach follows the same beliefs as Maslow's hierarchy of needs, where the basic needs are the first to be met and the need for self-actualisation or the desire to succeed over and above basic survival, are at the top of the pyramid.

3.4 Change management models

There is a wide range of models and approaches to organisational change; many of which relate to specific metaphors. Table 3.1 therefore shows which metaphors are associated with the popular models associate. The current study examines Lewin's three-step model, Kotter's eight-step model and Bullock and Batten's phases of planned change.

Table 3-1: Models of change and their associated metaphors (Cameron & Green, 2019)

Model or approach	Machine	Metaphor		Flux and transformation
		Political system	Organism	
Lewin, three-step model	✓		✓	
Bullock and Batten, planned change	✓			
Kotter, eight steps	✓	✓	✓	
Beckhard and Harris, change formula			✓	
Nadler and Tushman, congruence model		✓	✓	
William Bridges, managing the transition	✓		✓	✓
Carnall, change management model		✓	✓	
Senge, systemic model		✓	✓	✓
Stacey and Shaw, complex responsive processes		✓		✓

3.4.1 Lewin's change management model

In as early as the 1940s, Lewin introduced the three-step model of change. These three steps consist of unfreeze, move and refreeze, as illustrated in Figure 3.2 (Manzano, 2020). During the unfreezing stage, the motivation for change is created, bringing with it the psychological safety that enables employees to overcome anxiety about learning new skills. According to Manzano (2020), the second stage, 'move', is the most difficult stage. This is the stage that has the greatest impact on the employees, as it is also when the implementation of the change starts and where solutions are found in trial-and-error learning. During the refreezing stage, the new concepts are internalised. This model further suggests that the perception that change is necessary, in other words, change readiness, needs to be present before the change can be initiated.

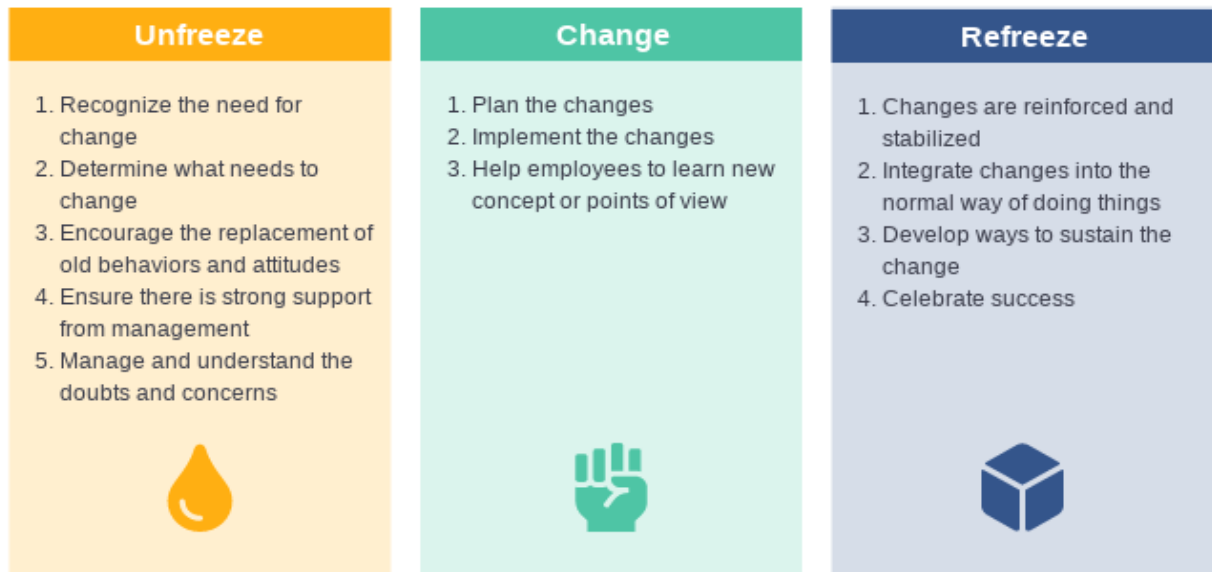


Figure 3-2: Lewin's change model

Lewin's model is based on the idea of an organisation as an organism. The force field analysis was also introduced by Lewin. This analysis examines the driving and resisting forces during change; for success, the driving forces need to be more than the resisting forces. An example of using the force field analysis is displayed in Figure 3.3, where the board wants to speed up the executive reporting process. The driving forces are displayed on the left while the resisting forces are displayed on the right. This analysis works best when used in combination with an analysis of the current state together with the desired state. Managers should also use this form of analysis during the 'unfreeze' stage of Lewin's model, for the planning session. The implementation happens during the 'move' stage and the 'refreeze' stage is used as a 'post-implementation' review. Lewin's model can be time-consuming but is ideal for large scale changes in organisations.

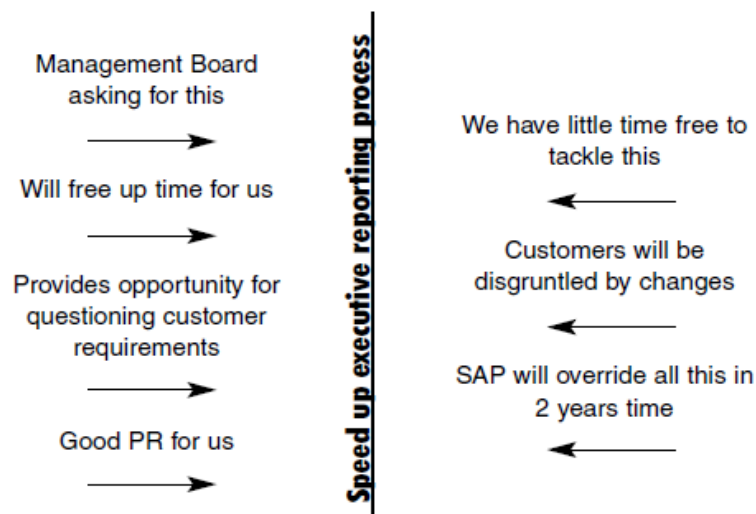


Figure 3-3: Lewin's force field analysis

3.4.2 Kotter's theory

In 1995, Kotter analysed 100 different organisations going through change (Kotter, 1995). It was during this analysis that he compiled eight crucial steps to ensuring that transformational efforts do not fail. These eight steps are:

1. **Establish a sense of urgency:** When a sense of urgency is created to initiate change, it will provide the energy necessary to get everybody on board and motivated. This can start with a small group of employees who will in turn discuss the change with others and encourage each other.
2. **Form a powerful guiding coalition:** A strong core team is needed, creating cohesion, consisting of people from various levels of experience and skillsets that can reach out to every employee in the organisation.
3. **Create a vision:** The vision needs to be simple, short and definable. A clear description of the values that the change will achieve is necessary in simple enough language that everyone understands what is meant.
4. **Communicate the vision:** Regular meetings are suggested where management should not only share the vision but where feedback and discussions around the change are encouraged. This will not only encourage the employees but will also make them part of the change and may produce another angle of looking at the change to be initiated.
5. **Empower others to act on the vision:** One of the barriers to change is the lack of skills necessary when implementing change in processes. It is vital to develop the necessary skills needed for the change to be effective before implementing change.
6. **Plan for and create short-term wins:** When the initial motivation for change wears off, it is often difficult for employees to persist with the change if they do not see immediate results. Management must acknowledge and celebrate milestones to keep employees motivated.
7. **Consolidate improvements and produce more change:** During this stage, management takes stock of the change already initiated, evaluates the change and outcomes thereof and suggests improvements where necessary.
8. **Institutionalise new approaches:** New processes need to be documented in the organisation's quality manual and must become part of the culture of the organisation.

A simple way to do this is to recognise the contributions of the original team responsible for the change process and to encourage feedback on the outcomes of the change.

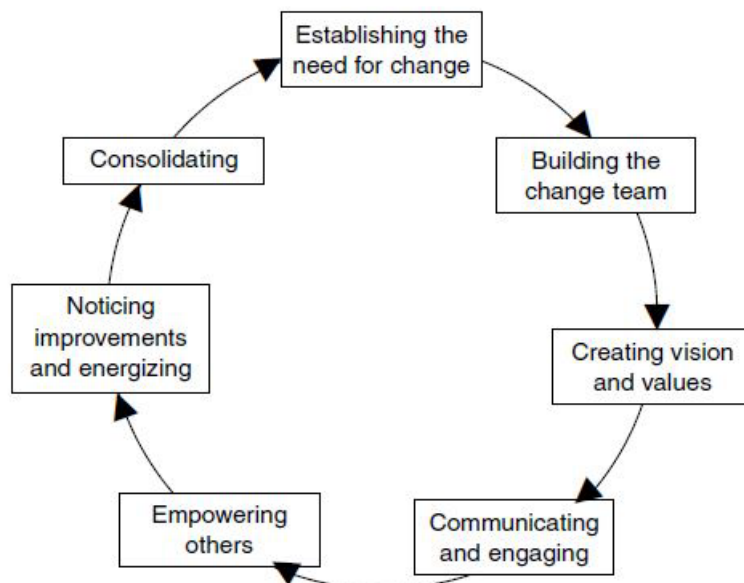


Figure 3-4: Kotter's eight-step model (Cameron & Green, 2019)

The essence of the success of this model is not to lose traction after stage five. Thereafter, everyone involved should follow-through with as much enthusiasm as possible right to the end.

3.4.3 Bullock and Batten's phases of planned change

Bullock and Batten's model is based on a project management approach and implies that change is planned in four identified stages (Bullock & Batten, 1985). Their model is similar to Lewin's three-step model, with the difference in the 'unfreezing' stage of Lewin split into two phases, namely exploration and planning. The four stages of Bullock and Batten's model are:

1. **Exploration:** During this stage, the need for change is explored and resources are acquired to make the change.
2. **Planning:** During the planning stage, key decision-makers and technical experts are involved to make a diagnosis and a change plan is formulated.
3. **Action:** The change plan is implemented and constant feedback is given which will indicate if re-planning is necessary.
4. **Integration:** During integration, the change is aligned with other areas in the organisation and is formalised in the organisation's policies.

This model simplifies the change process by isolating the area in the organisation where the change will take place. Whilst it works well for isolated changes, it lacks detail when facing more complex changes.

3.5 Climate of change

The most significant purpose of all the change management models is inherently the same, namely to create an organisational climate or culture where change is welcomed and embraced. Organisational climate or culture, as previously discussed in Section 2.5 of this paper, refers to the perceptions and norms of the work environment and focuses mainly on the relationship between the organisation and its employees. The organisational climate has a significant influence on the motivation and job satisfaction of employees and therefore also influences the efficiency of the employees. When an organisation has a strong BPM-supportive culture, the climate of change is present and change is welcomed and supported. Employees will have an “openness to change” and will be active participants of the change. (Yue *et al.*, 2019:2) regard openness to change as a precursor to readiness to change.

A vital component in organisational change is leadership. With the perceived risks associated with change, employees are more reluctant to change unless they feel secure. Therefore, trust among employees and their management is vital when it comes to change readiness (Matthysen & Harris, 2018). Successful leaders understand that change is not only necessary but vital for organisations to be sustainable and thrive. In their book, *Making sense of change management*, Cameron and Green (2019) identified three dimensions of leadership that are important in change management. Leaders naturally concentrate on outcomes and results, however, they need to realise that underlying emotions, authority and power play an equally important role in change management.

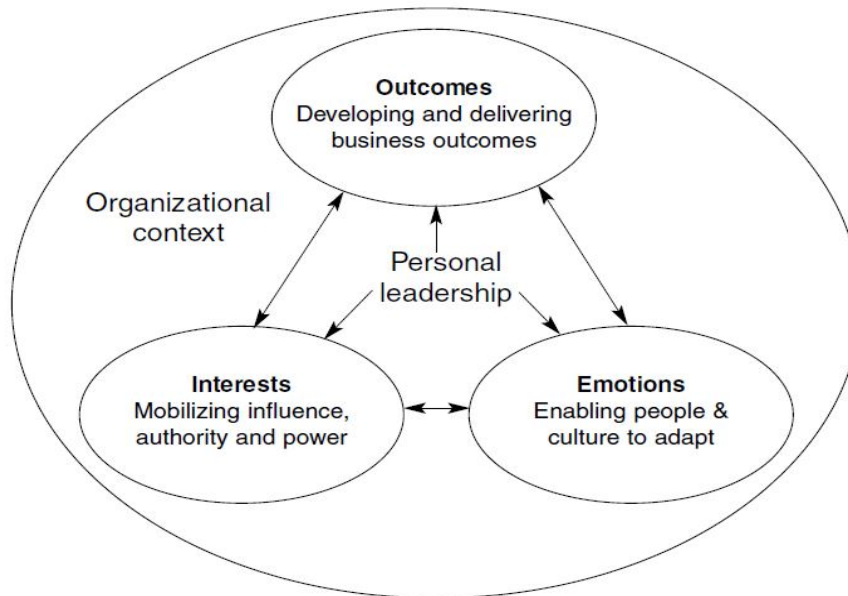


Figure 3-5: Three dimensions of leadership (Cameron & Green, 2019)

In his article *Overcome the barriers to successful team and organisational change*, Michael Taylor (the Managing Director of Xponential), identifies the managers' or leaders' responsibility to drive employee engagement (Taylor, 2019:18). According to Taylor (2019), more than 80% of managers are using results-driven styles and do not understand the style of leadership that can be defined as visionary or talent-building. He sees the current approach of leadership as sub-optimal and suggests that leaders need to adjust to operating at the 'next level' regarding emotional maturity. Taylor (2019) regards the 'leadership' barrier as one of the most crucial and impactful barriers to change in the organisation. Leaders should constantly keep their eyes on all three dimensions, as illustrated in Figure 2.1.

Leadership plays an important part in employees' trust in the organisation. When employees place their trust in an organisation, they make themselves vulnerable. This vulnerability, together with the employees' reliance on the organisation and its leadership are the two central components of relational trust. Employees expect honesty, reliability and integrity from their leaders and the organisation. Hon and Grunig (1999, as cited by Yue *et al.*, 2019) identified three dimensions of trust, namely integrity, dependability and competence. The extent of trust from the employees towards their managers has a vital impact on their cooperation, productive relationships and communication in the organisation.

Leaders' interest in maintaining and enhancing their relationship with employees often shows in their adoption of transparent communication which, in turn, promotes organisational trust. Transparent communication must be the core characteristic of internal communication. Transparency consist of three types, namely informational-, participatory- and accountability transparency. Informational transparency refers to the disclosure of "truthful, substantial and

useful” information (Rawlins, 2008:6). Participatory transparency requires the organization to put effort into understanding the information that the employees requires. Accountability transparency refers to the inclusion of positive as well as negative information.

Cameron and Green further examined the different phases of change and suggested that different leadership skills are needed during the different phases of change. They summarised the inner and outer leadership skills required during the different phases of a change process, as described in Table 3.2.

Table 3-2: Leadership of change phase-by-phase, comparing inner and outer leadership requirements (Cameron & Green, 2019)

Phase of change	Outer leadership – observable actions of the leader	Inner leadership – what goes on inside the leader
1. Establishing the need for change. The leader illuminates a problem area through discussion.	Influencing, understanding, researching, presenting, listening	Managing emotions, maintaining integrity, being courageous, being patient, knowing yourself, judging whether you really have the energy to do this
2. Building the change team The leader brings the right people together and establishes momentum through teamwork.	Chairing meetings, connecting agendas, facilitating discussion, building relationships, building teams, cutting through the politics	Social and organizational awareness, self-awareness, managing emotions, adaptability, taking initiative, having the drive to achieve, maintaining energy despite knock-backs
3. Creating vision and values The leader works with the group to build a picture of success.	Initiating ideas, brainstorming, encouraging divergent and creative thinking, challenging others constructively, envisaging the future, facilitating agreement	Strategic thinking, taking time to reflect, social awareness, drive to achieve, managing emotions
4. Communicating and engaging The leader plays his or her role in communicating direction, giving it meaning, being clear about timescale and letting people know what part they will be playing.	Persuading and engaging, presenting with passion, listening, being assertive, being creative with ways of communicating	Patience, analysis of how to present to different audiences, managing emotions with regard to other people's resistance, social awareness, adaptability, empathy
5. Empowering others The leader entrusts those who have been involved in the creation of the new vision with key tasks.	Clear target setting, good delegation, managing without micromanaging or abdicating, coaching	Integrity, trust, patience, drive to achieve, steadiness of purpose, empathy
6. Noticing improvements and energizing The leader stays interested in the process. This involves the ability to juggle lots of different projects and initiatives	Playing the sponsorship role well, walking the talk, rewarding and sharing success, building on new ideas	Steadiness of purpose, organizational and social awareness, empathy, managing emotions, drive to achieve
7. Consolidating The leader encourages people to take stock of where they are, and reflect on how much has been achieved	Reviewing objectively, celebrating success, giving positive feedback before moving on to what's next	Social awareness, empathy, drive to achieve, taking time to reflect, steadiness of purpose

3.6 Readiness for change

The term 'readiness to change' can be defined as the employees' willingness, ability and preparedness to change. When readiness for change is present in the employees of an organisation, they will embrace change and resistance to change is reduced significantly. In their article *Cognitive beliefs and positive emotions about change: Relationships with employee change readiness and change-supportive behaviours*, Rafferty and Minbashian (2019) focussed specifically on "change recipients' change attitudes" and "change readiness". They identified change readiness as a mix of change beliefs, positive attitudes towards change and behaviours that are supportive of change. They further identified five cognitive beliefs as an essential belief preceding the readiness to change. These five beliefs are:

- The **discrepancy belief** refers to a belief that change is needed to address a deficiency in the organisation.
- The **belief of appropriateness** is the belief that the specific change is the most appropriate step in rectifying an issue in the organisation.
- The **belief of self-efficacy** refers to the employee's belief that he is capable of implementing the change.
- The **belief of principal support** refers to the perceived support that the employees will receive from the leaders in the organisation.
- The **valence belief** can be defined as a belief that the change will have benefits, extrinsic as well as intrinsic.

It is evident that when change management is done correctly (as seen in the previously discussed models of change), these beliefs are all addressed during the different phases or stages of change management. Therefore, it is safe to assume that when an organisation has a BPM-supportive culture and change management is correctly applied, the stage of readiness to change will be reached much easier and the possibility of the successful implementation of change is much higher. Weiner (2020) defines organisational readiness for change as a "multi-level as well as multi-faceted construct". These facets can include emotional, cognitive and intentional readiness. He further suggests that organisational readiness for change cannot be viewed as a general state of affairs but should rather be viewed as situational.

Emotional readiness to change is often also referred to as effective readiness and relates to the adaptability of employees. It implies that the employees will have a positive reaction to the implementation of change.

Cognitive readiness is defined by Fletcher and Wind (2014:27) as “the mental preparation (including skills, knowledge, abilities, motivations and personal disposition) an individual need to establish and sustain competent performance.” Cognitive readiness originated in the Department of Defence, when the department queried how to prepare soldiers to ensure that, while they were dealing with rapid change, they would take the best possible decision on the battlefield (Belack *et al.*, 2019). Cognitive readiness is associated with change efficacy or the perception of employees of certain capabilities, such as resource availability, task demands and outcomes of the change.

Intentional readiness for change refers to the effort that employees are willing to invest in the process of change (Bogan, 2017). Employees often realise that change is necessary and are willing to invest in it but due to other factors present in the organisation, they do not have confidence in the change process. This will negatively influence their readiness to change.

Using a change model when implementing change will therefore assist the organisation to fulfil the requirements necessary to ensure that employees are ready for change. Any one or a combination of the models examined in this section would thus be beneficial to the HEI unit currently under study.

3.7 Summary

To summarise the literature review, Table 3.3 compares the characteristics of the change models that were studied with the characteristics of a BPM-supportive culture and the vital components necessary to ensure change readiness. When viewing this table, the importance of change management as a tool to create change readiness is evident. Change management creates a culture in the organisation where change is welcomed and embraced, whilst employees feel secure and emotionally ready to accept change without resistance.

Table 3-3: Comparison of important characteristics of change models, change management and change readiness.

Change model	Description of change model	Important characteristics	BPM-supportive characteristics	Change readiness
Lewin's three-step model	Viewing change as a process of movement from the current stage to the end stage and underpinned by a force field analysis, action research and group dynamic that supports planned change	Creating motivation for change. Ensure strong support from management Manage doubts	Core elements: Strategic alignment, Governance (high level of transparency and accountability), Methods (supporting and enabling), IT, People (expertise), Organisational culture.	Establish a sense of urgency Empowering team members Create an appealing vision for the future

Bullock and Batten's phases of planned change	Builds on a project management platform that sees a change from a technical viewpoint, focusing on the four stages of exploring, planning, action and integration	Involvement of key decision-makers (participation) Constant feedback	Process enablers: Design, performers, owner, infrastructure, metrics. Enterprise capabilities: Leadership, culture, expertise, governance. Values: Customer orientation, Excellence, Responsibility, Teamwork	Change efficacy Cognitive beliefs: Discrepancy, Appropriateness, Self-efficacy, Principal support, Valence.
Kotter's eight-step model	A sequential eight-step process involving the formation of a guiding coalition, vision and strategy, communicating the vision, empowerment, generating short-term wins, consolidation and finally institutionalisation	High communication levels Coalition Participation		

CHAPTER 4: EMPIRICAL STUDY

4.1 Introduction

This chapter presents the research design and methodology used to collect data. It will also describe how the data was analysed to achieve the objectives and aim of this study.

4.2 Population

The population studied was selected using the convenience procedure of data sampling, which implies the sampling of data from a readily available population. The population of this study consists of a select group of support personnel in the operations management segment of a unit within an HEI in South Africa. The HEI established this unit in order to support faculties with the coordination and administration of all non-formal academic programmes that are not listed on the University PQM as formal programmes. These programmes may include short courses, workshops and short learning programmes and are referred to as Continuous Education (CEd) offerings. This self-sustaining unit within the University reports to the Deputy Vice-Chancellor: Teaching and Learning (DVC: T-L).

4.2.1 Objectives of the unit

The objectives of this unit are to:

- Support the DVC: T-L in the compilation and revision of the HEI's CEd strategy through market needs analysis, in collaboration with the faculties and external stakeholders.
- Conduct regular planning to incorporate the unit's operational requirements flowing from the CEd strategy and compile an annual Operational Plan.
- Provide logistic and administrative coordination services to faculties for optimal execution of teaching and learning processes.
- Manage participant registration, administration and records.
- Manage training and certification event logistics and administration.
- Manage the financial administration of CEd programmes.
- Develop and implement systems, processes and procedures for marketing and publicity.

- Develop, implement and maintain a reporting system providing operational as well as managerial information that contributes to optimal decision making and continuous improvement.
- Develop, implement and maintain a QMS that provides for quality assurance, quality evaluation and continuous improvement.
- Develop, implement and maintain information systems to record service delivery processes.
- Adopt a quality risk-based approach to identify, assess and manage threats to sustained quality.

4.2.2 Positioning and operating structure

In this HEI, the Council for Teaching and Learning (CTL) is responsible for governance, while the University Management Committee (UMC) is responsible for executive management of the HEI. The DVC: T-L, a member of the UMC, is responsible for teaching and learning. CEd forms part of Teaching-Learning and as such the unit reports to the DVC: T-L. The DVC: T-L is supported by the Continuing Education Advisory Committee, composed of the executive deans of all faculties, in the alignment of CEd across faculties, campuses and delivery sites. The position of this unit within the organisational structure is indicated in Figure 4.1, while the organisational structure of this unit is depicted in Figure 4.2.

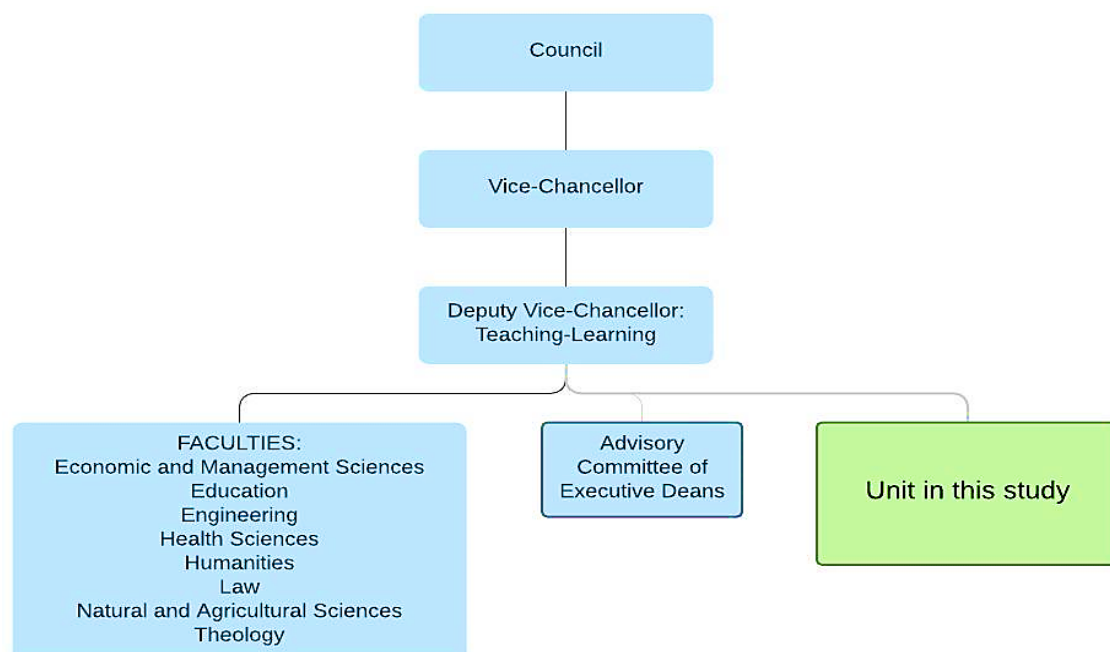


Figure 4-1: The position of the unit in the HEI

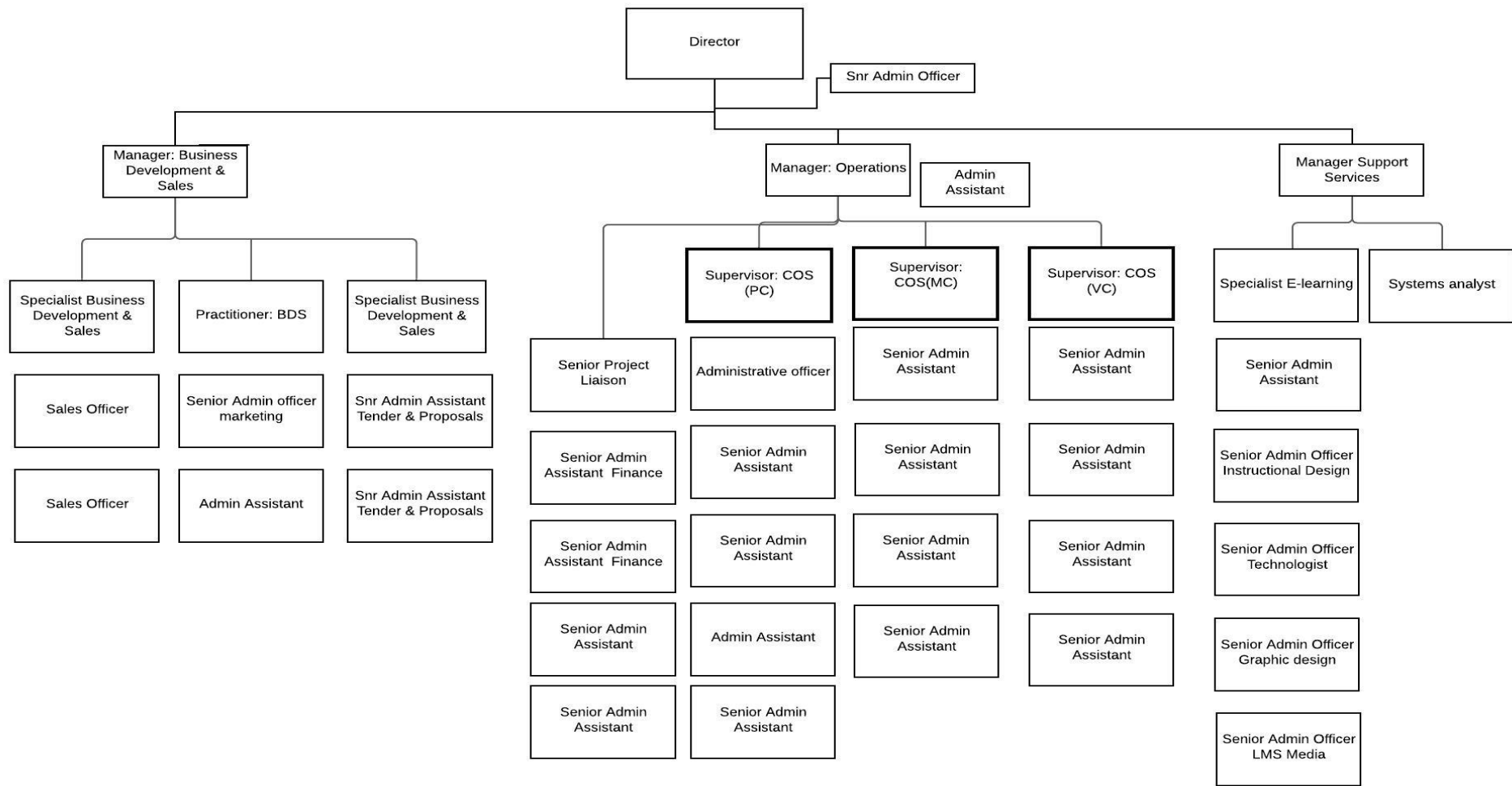


Figure 4-2: Organisational structure of the unit under study

This unit consists of three segments:

1. Business development with 10 positions, of which nine are filled;
2. Operations management with 23 positions, of which 21 are filled; and
3. Support services with eight positions, of which five are filled.

The unit is based in the North-West province of South Africa in a city with an estimated population of 43 000 permanent residents. The university where the unit is based has an estimate of 44 000 current full-time enrolments and consists of eight faculties. The unit that was chosen to study as it was easily accessible. Employees were willing and eager to contribute to the research as it will benefit all stakeholders.

The unit went through a restructuring process a year before the commencement of this study. It was subjected to ample sudden and unplanned changes during this time. Perceptions were created for certain placements and the promotion of specific employees. Furthermore, the unit has been without a permanent appointed director for more than a year, which contributed to a lack of leadership and consistency in the unit.

Recently, this unit developed and implemented a slightly adapted QMS. Before this, the functions in the unit still overlapped between different segments and the responsibility for certain tasks was a grey area. The unit and the employees would thus benefit when implementing a structured process, by supplying stability and structure to the personnel, which in turn will boost the morale of the employees.

Other units (such as the Project management or Event Management Units) could have been studied but given the time constraint of the research, this unit is a perfect research model. The unit represents the general administration processes of any company delivering a service.

Of the 35 employees in this unit, 26 employees agreed to participate in this study. The demographics of the participants are exhibited in Tables 4.1 to Table 4.3.

Table 4-1: Age of the participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20 – 30	6	23.1	23.1	23.1
	31 – 40	10	38.5	38.5	61.5
	41 – 50	6	23.1	23.1	84.6
	51 – 60	4	15.4	15.4	100.0
	Total	26	100.0	100.0	

Table 4-2: Gender of the participants

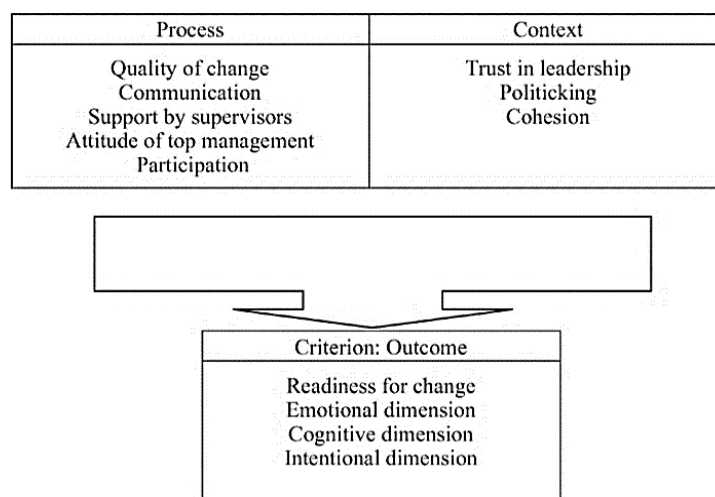
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	20	76.9	76.9	76.9
	Male	6	23.1	23.1	100.0
	Total	26	100.0	100.0	

Table 4-3: Section of the unit in which participants work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Business Development	3	11.5	11.5	11.5
	Online learn	3	11.5	11.5	23.1
	Operations	20	76.9	76.9	100.0
	Total	26	100.0	100.0	

4.3 Gathering of data

Data was gathered by the distribution of structured quantitative questionnaires with close-ended questions to the employees in the unit. A Likert-type scale was used to evaluate each answer. The questionnaire was developed by Bouckennooghe, Devos and Van den Broeck (2009), as an instrument to specifically measure the climate of change or internal context, the process of change and the readiness for change (Bouckennooghe *et al.*, 2009). These three main areas of the questionnaire are further divided into 10 dimensions as can be seen in Figure 4.3. The timing of the distribution of the questionnaires was planned purposefully, to coincide with the pre-implementation phase of the changes in structure. This was done in order to test the employees' readiness to change.

**Figure 4-3: Classification of climate dimensions (Bouckennooghe *et al.*, 2009)**

4.4 Reliability and validity

Reliability occurs when the same answer is achieved multiple times when using the same instrument to measure something; the results are thus stable and consistent. Validity refers to the degree to which an instrument measures what it is intended to measure (Dudovskiy, 2018). Instruments used in the research therefore needed to adhere to reliability as well as validity.

In designing the questionnaire as a measuring instrument, the authors followed a step-by-step procedure. These steps were recommended by Hinkin (1998), who specified the content dimensions of climate of change. He developed items that would measure the domain as well as the extent of this measurement, which resulted in 63 items in 12 dimensions. In consultation with 10 experts, Hinkin conducted three independent field studies to examine the reliability and validity of the scales and concluded with the 10 dimensions and 53 items in the self-report battery, namely the OCQ-C, P, R (Organisational Change Questionnaire-Climate of Change, Processes and Readiness). This psychometrically sound instrument measures three dimensions, namely 1) Process of change; 2) Climate of change and 3) Readiness for change. Therefore, it can be concluded that the questionnaire adheres to the specifications needed to provide reliability and validity.

The authors of this questionnaire tested the items and scales in organisations just before and during the implementation of change. They suggested that this tool be administered in the same conditions of change, before and during change implementation. This makes the questionnaire ideal for the current unit under study, as it needs to implement the newly developed QMS.

When using a Likert-type scale in research questionnaires, the calculation of Cronbach's alpha coefficient is vital for internal consistency and reliability. Cronbach's alpha reliability coefficient ranges between 0 and 1, with greater internal consistency closer to 1.

The formula for Cronbach's alpha is $\alpha = \frac{rk}{[1+(k-1)r]}$ (Gliem & Gliem, 2003); where: k = the number of items considered and r = the mean of the inter-item.

Tables 4.4 to Table 4.7 display the Cronbach's alpha value for this study, as calculated using SPSS. When looking at the Cronbach's alpha in Table 4.4 for the whole questionnaire, the value of $\alpha=0.842$ implies that this questionnaire is reliable. If the Cronbach's alpha is calculated for the different dimensions that were measured separately, the dimensions of Process of change and Readiness for change still show reliability with $\alpha = 0.884$ and $\alpha = 0.817$,

respectively. However, the dimension Climate of change shows a value of $\alpha = -0.36$. This value might be due to the small number of participants that were used in this study.

Table 4-4: Cronbach's alpha for questionnaire combined

Reliability Statistics			
Cronbach's alpha	Cronbach's alpha based on standardised items	N of items	
0.842	0.851	53	
Mean	Variance	Std. Deviation	N of Items
160.35	288.635	16.989	53

Table 4-5: Cronbach's alpha inter-item correlation: Process of change

Reliability Statistics			
Cronbach's alpha	Cronbach's alpha based on standardised items	N of items	
0.884	0.884	29	
	Mean	Minimum	Maximum
Inter-item correlations	0.2950	2.154	4.000

Table 4-6: Cronbach's alpha inter-item correlation: Climate of change

Reliability Statistics			
Cronbach's alpha ^a	Cronbach's alpha based on standardised items ^a	N of items	
-0.360	-0.302	11	
	Mean	Minimum	Maximum
Inter-item correlations	0.257	-0.242	0.733

Table 4-7: Cronbach's alpha inter-item correlation: Readiness for change

Reliability Statistics			
Cronbach's alpha	Cronbach's alpha based on standardised items	N of items	
0.817	0.818	13	
	Mean	Minimum	Maximum
Inter-item correlations	0.257	-0.242	0.733

4.5 Method of analysis

Quantitative research transforms raw data into meaningful information which can be interpreted. The first step is data tabulation, where the responses (raw data) to the questionnaires were imported into an Excel spreadsheet and data cleaning was performed. Data cleaning is the process whereby the researcher removes any incorrect, duplicate or corrupted data. Coding was done by assigning values to the answers. The questions in the questionnaire were sorted according to the dimension which they represent. The data were imported into SPSS and analysed to calculate the mean for each question. The mean refers to the average score when the sum of scores for each question is added and then divided by the number of participants. Once the data were analysed, patterns emerged and from these, the summaries in the next chapter were obtained.

CHAPTER 5: DATA ANALYSIS AND DISCUSSION

5.1 Introduction

This chapter discusses the analysis and interpretation of the data that were collected from the questionnaire. Of the 35 employees in the unit, 26 employees agreed to participate in the study. A summary of the dimensions and questions of the questionnaire is displayed in Table 5.1. Table 5.2 provides a summary of all the responses received from the participants.

Table 5-1: Summary of questionnaire distributed

Dimension	Sub-dimension	Item on survey
Process of change	Quality of change communication	Questions 3, 12, 22, 36, 47, 65, 76, 20
	Participation	Questions 5, 11, 25, 34, 35, 42, 50, 51, 71, 74, 77
	Attitude of top management	Questions 17, 66, 69
	Support by supervisors	Questions 101, 37, 38, 15, 31, 40, 60
Climate of change / Internal Context	Trust in leadership	Questions 19, 44, 58
	Politicking	Questions 8, 9, 30
	Cohesion	Questions 2, 14, 24, 48, 61
Readiness change for	Emotional readiness for change EMRE	Questions 4, 33, 75, 55, 73
	Cognitive readiness for change COGRE	Questions 41, 59, 62, 39, 56
	Intentional readiness for change INRE	Questions 18, 57, 67

Table 5-2: Analysis of questionnaire – all questions combined

	Strongly agree		Disagree		Neutral		Agree		Strongly agree			
Question	Frequency	Valid %	Frequency	Valid %	Frequency	Valid %	Frequency	Valid %	Frequency	Valid %	Mean	Standard deviation
I am regularly informed on how the change is going	6	23.1%	10	38.5%	5	19.2%	4	15.4%	1	3.8%	2.38	1.134
There is good communication between project leaders and staff members about the organisation's policy toward changes	4	15.4%	12	46.2%	6	23.1%	2	7.7%	2	7.7%	2.46	1.104
Corporate management team clearly explains the necessity of the change	1	3.8%	15	57.7%	5	19.2%	3	11.5%	2	7.7%	2.62	1.023
Information provided on change is clear	1	3.8%	14	53.8%	5	19.2%	6	23.1%	0	0.0%	2.62	0.898
Information concerning the changes reaches us mostly as rumours	0	0.0%	3	11.5%	3	11.5%	11	42.3%	9	34.6%	4.00	0.980
We are sufficiently informed of the progress of change	2	7.7%	12	46.2%	7	26.9%	5	19.2%	0	0.0%	2.58	0.902
Corporate management team keeps all departments informed about its decisions	2	7.7%	14	53.8%	7	26.9%	2	7.7%	1	3.8%	2.46	0.905
Two-way communication between the corporate management team and the departments is very good	3	11.5%	9	34.6%	9	34.6%	4	15.4%	1	3.8%	2.65	1.018
Changes are always discussed with all people concerned	4	15.4%	13	50.0%	5	19.2%	4	15.4%	0	0.0%	2.35	0.936

Those who implement change, have no say in developing the proposals	2	7.7%	1	3.8%	12	46.2%	6	23.1%	5	19.2%	3.42	1.102
Decisions concerning work are taken in consultation with the staff who are affected	1	3.8%	13	50.0%	4	15.4%	5	19.2%	3	11.5%	2.85	1.156
My department's management team takes account of the staff's remarks	0	0.0%	4	15.4%	10	38.5%	12	46.2%	0	0.0%	3.31	0.736
Departments are consulted about the change sufficiently	2	7.7%	13	50.0%	6	23.1%	4	15.4%	1	3.8%	2.58	0.987
Staff members were consulted about the reasons for change	5	19.2%	10	38.5%	6	23.1%	5	19.2%	0	0.0%	2.42	1.027
Front line staff and office workers can raise topics for discussion	3	11.5%	5	19.2%	7	26.9%	10	38.5%	1	3.8%	3.04	1.113
Our department provide sufficient time for consultation	2	7.7%	10	38.5%	8	30.8%	6	23.1%	0	0.0%	2.69	0.928
It is possible to talk about outmoded regulations and ways of working	1	3.8%	4	15.4%	11	42.3%	9	34.6%	1	3.8%	3.19	0.895
The way change is implemented leaves little room for personal input	0	0.0%	3	11.5%	10	38.5%	11	42.3%	2	7.7%	3.46	0.811
Staff members are sufficiently involved in the implementation of the changes by our department's senior managers	3	11.5%	12	46.2%	8	30.8%	3	11.5%	0	0.0%	2.42	0.857
Corporate management team has a positive vision of the future	0	0.0%	5	19.2%	9	34.6%	8	30.8%	4	15.4%	3.42	0.987

Corporate management team is actively involved with the changes	1	3.8%	8	30.8%	10	38.5%	6	23.1%	1	3.8%	2.92	0.935
Corporate management team supports the change process unconditionally	0	0.0%	5	19.2%	13	50.0%	7	26.9%	1	3.8%	3.15	0.784
My manager does not seem very keen to help me find a solution if I have a problem	9	34.6%	8	30.8%	5	19.2%	4	15.4%	0	0.0%	2.15	1.084
If I experience any problems, I can always turn on my manager for help	2	7.7%	2	7.7%	6	23.1%	6	23.1%	10	38.5%	3.77	1.275
Our department's senior managers coach us very well about implementing change	2	7.7%	8	30.8%	10	38.5%	5	19.2%	1	3.8%	2.81	0.981
Our department's senior managers have trouble in adapting their leadership styles to the changes	1	3.8%	5	19.2%	11	42.3%	7	26.9%	2	7.7%	3.15	0.967
My manager can place herself/himself in my position	1	3.8%	7	26.9%	9	34.6%	6	23.1%	3	11.5%	3.12	1.071
My manager encourages me to do things that I have never done before	1	3.8%	1	3.8%	6	23.1%	14	53.8%	4	15.4%	3.73	0.919
Our department's senior managers pay sufficient attention to the personal consequences that the changes could have for their staff members	2	7.7%	8	30.8%	9	34.6%	6	23.1%	1	3.8%	2.85	1.008

5.2 Data analysis

5.2.1 Analysis of Process of change

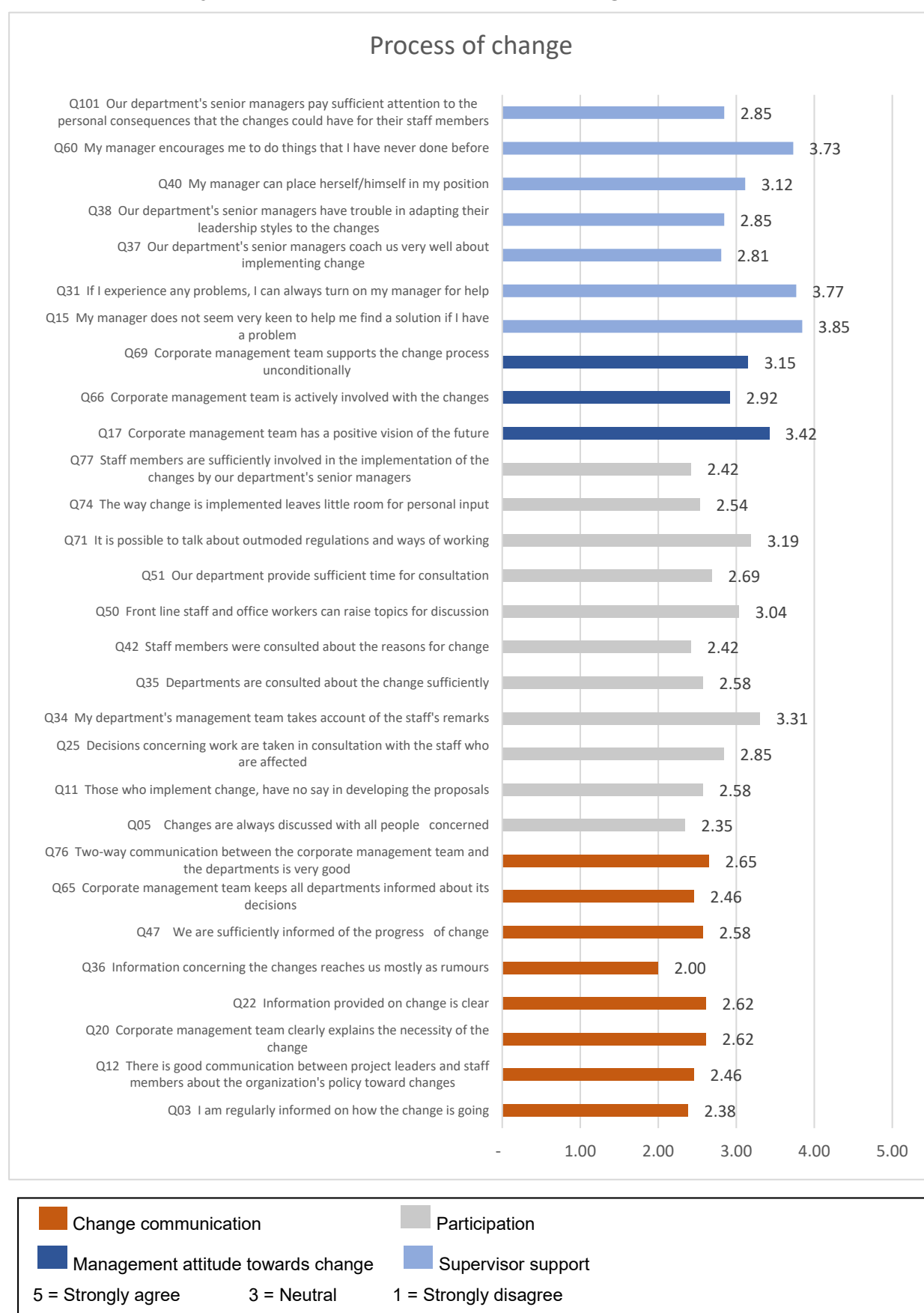
The process of change was divided into four sub-dimensions, namely 1) Quality of change communication, 2) Participation, 3) Attitude of management towards change and 4) Support provided by supervisors. The mean values for these dimensions are displayed in Table 5.3 and the sub-dimensions are colour coded for convenience.

With an average score of 2.47 for change communication and 2.72 for participation, it was evident that the employees felt excluded in communication and did not feel part of the implementation of change. According to Question 36, most employees felt that they heard about the change from a third party.

Management's attitude towards change and supervisor support scored slightly higher. However, it was still a significantly low score and added to the presumption that the employees felt that change management was not properly handled in the unit.

The scores on Questions 34, 50, 71, 17, 69, 31, 60 showed that a significant number of employees felt that their line management or supervisors were open for discussion. This created the perception that the lack of communication stemmed largely from top management.

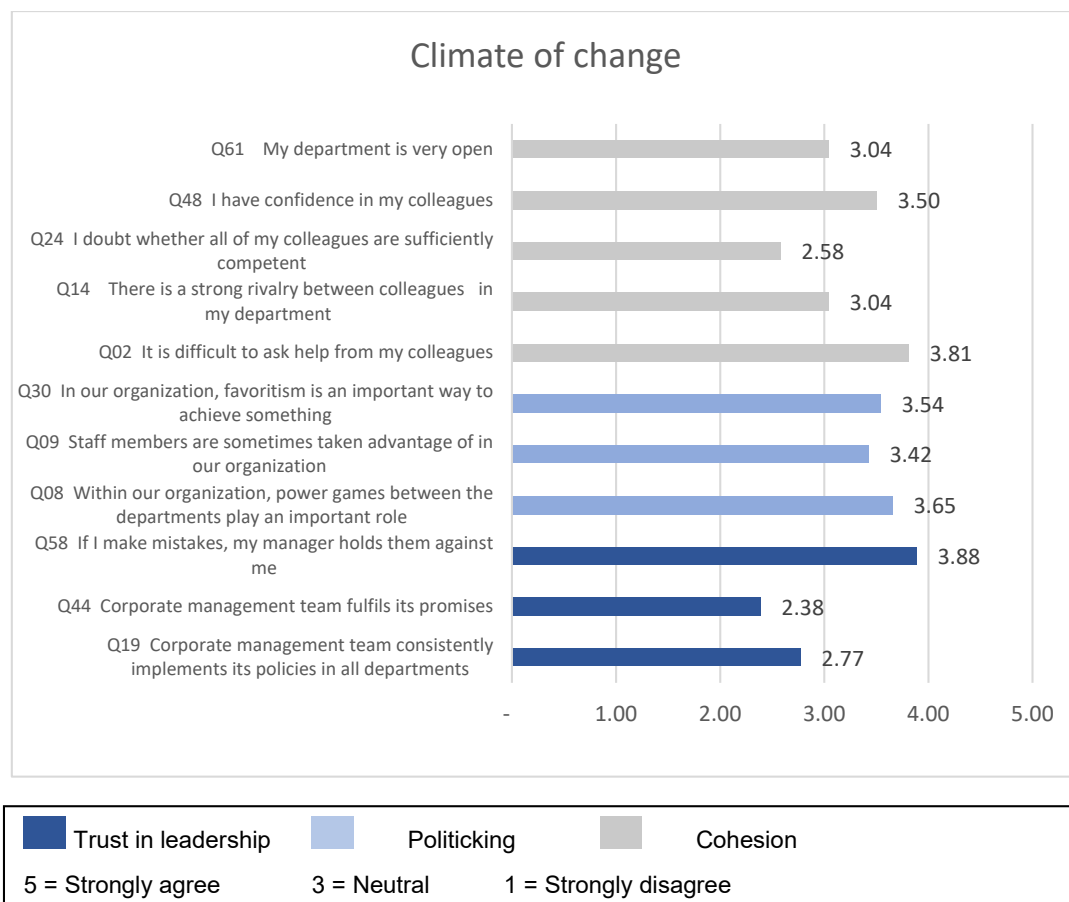
Table 5-3: Analysis of the dimension: Process of change



5.2.2 Analysis of Climate of change

Table 5.4 shows the results for the dimension Climate of change, which refers to the internal circumstances of the unit. The average score for trust in leadership was a concerning 3.01; Question 44 indicated that corporate management did not fulfil their promises. Although the score for politicking was still below 4 (average of 3.54), it should have raised red flags for management. The low average of cohesion indicated a lack of teamwork and team spirit in the unit.

Table 5-4: Analysis for the dimension: Climate of change

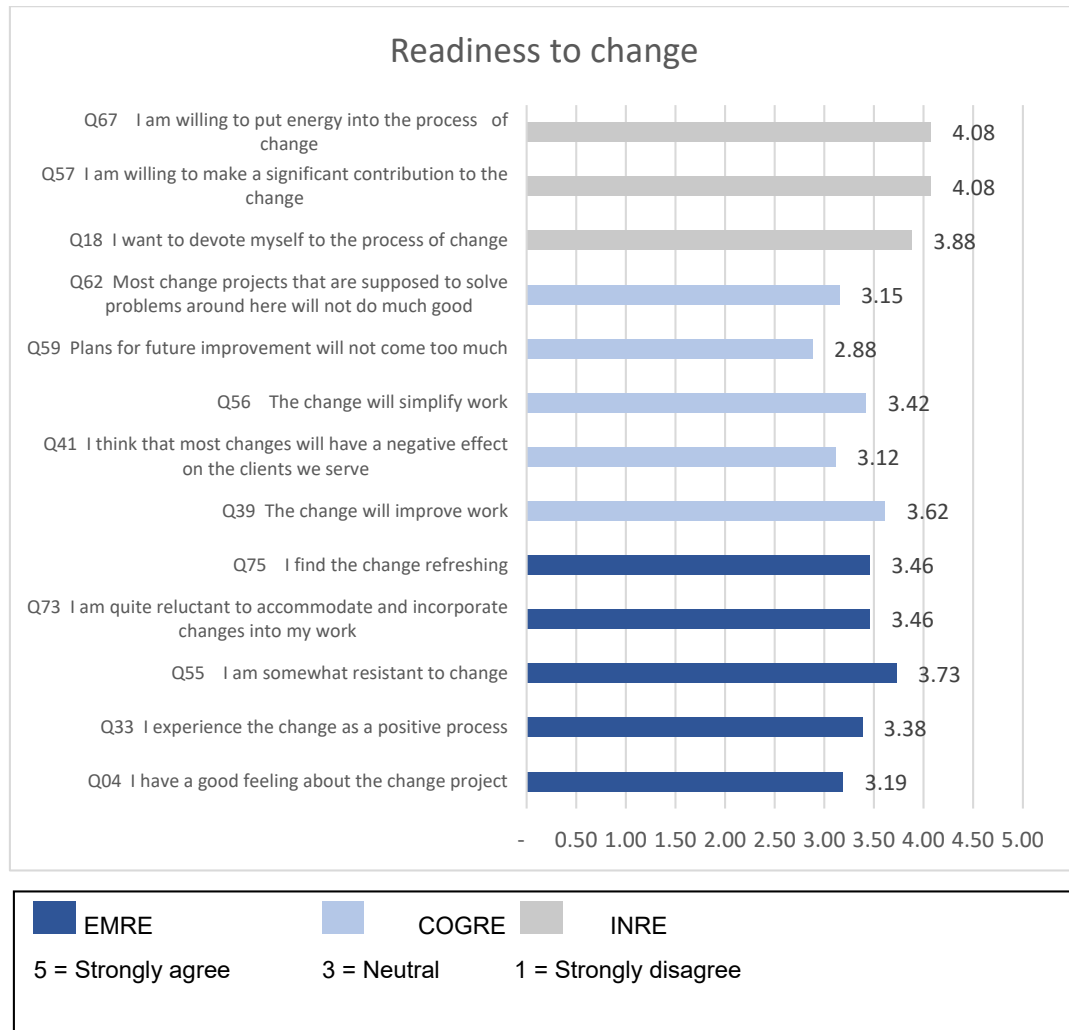


5.2.3 Analysis of Readiness to change

Table 5.5 displays the average scores for the dimension Readiness to change. Readiness to change is measured in three sub-dimensions, namely Emotional, Cognitive and Intentional readiness to change. Emotional readiness to change (EMRE) refers to the employees' emotional reaction towards the implementation of change. With an average of 3.45 and the highest score of 3.73 for question Q55, there was a definite indication that the employees did experience some anxiety towards change. Cognitive readiness to change (COGRE) refers to the employees' thoughts and beliefs about change. With an average of 3.24, it was evident

that the employees did not feel very positive about change. Intentional readiness to change (INRE) refers to the employees' willingness to put the effort into change. INRE had the highest score of all the dimensions. With an average of 4.01, it was evident that the employees were willing to put effort into change.

Table 5-5: Analysis for the dimension: Readiness to change



5.3 Summary

The population that was studied was on the brink of the implementation of a new QMS; it was expected that there might be some uncertainties and concerns. The questionnaire aimed to establish if the population was ready for the implementation of the new processes and procedures of the QMS. When comparing the data received from the questionnaire with the requirements for BPM-supportive business culture as discussed in Section 2.4, it was evident that the unit under study does not yet have a business culture that supports and encourages change management.

CHAPTER 6: INTERPRETATIONS, RECOMMENDATIONS AND CONCLUDING REMARKS

6.1 Introduction

The study aimed to investigate the readiness for change within a specific unit. As stated by Rizoto-Vidala-Pesoa and Kuznecova (2017), it is crucial for businesses to remain sustainable through the continuous implementation of new processes. Based on the quantitative data analysis of the readiness for change the literature study was divided into two chapters, firstly to understand the importance of business processes and secondly to conceptualise the process of change, climate of change and the readiness to change.

Providing for the implementation of processes within the business unit, it is important to understand that processes ensure optimisation for both the business and the employees. However, for successful business process implementation, management must scrutinise the impact of change on individuals. Implementation of new processes is challenging for individuals and should be approached with understanding and consideration.

The study was conducted through a Likert-type scale questionnaire, which was analysed and interpreted to determine the unit's readiness to change. From the study, the interpretation concluded several findings.

6.2 Process of change

The correct way to handle the process of change is important to ensure readiness to change. Engaging employees in the process of change and regular communication regarding the change is vital to ensure the participation of the employees. In the unit that was studied, change communication was not optimal and caused the employees to lose confidence and trust in management.

6.3 Climate of change

Creating cohesion in an organisation ensures that the employees work together as a team towards a common goal. When employees do not trust their leaders and the decisions made by them or communication provided by them, they do not feel loyal towards the organisation. In the unit that was studied, the lack of cohesion was evident in the research and has a negative influence on teamwork.

6.4 Readiness to change

Readiness to change is considered one of the core attributes in the successful implementation of change. Cognitive readiness leads to emotional readiness because people believe that they can handle change and the challenges that it provides.

When looking at the history of the unit, the lack of trust in management is no surprise. The lack of leadership contributes a great deal towards the lack of consistency and therefore the low score for the process of change is understandable. This is because employees who have trust in leadership feel secure and are more likely to accept change (Parlar *et al.*, 2018). The researcher found that the history of the unit created a culture where management was inconsistent and not trusted.

Readiness to change is dependent on the process of change, as employees who are prepared for change will perceive change positively and will not resist change (Matthysen & Harris, 2018). The questionnaire aimed to establish if the population that was studied was ready for the implementation of the new processes and procedures of the QMS. This study can conclude that the employees in the unit are not ready for the implementation of change. Management needs to tread cautiously and provide the employees with a better understanding of the change that needs to be implemented. Workshops explaining the importance of process management, which provide training about the new processes, can still make a difference in the way the employees perceive the change.

6.5 Limitations and future research

6.5.1 Population

The population that was used in this study was small. Therefore, better results may be obtained when a larger population is used.

6.5.2 Time limitations and survey

The time for this study was limited. The ideal would be to distribute the questionnaire a second time during the implementation of the change, in order to evaluate any change in the attitudes of the employees towards the implementation of the change.

6.6 Recommendation for further research

In discussing the limitations of the study and the data collected, two recommendations can be considered:

- To ensure validity, a second questionnaire should be conducted during the implementation of the new QMS; and
- Future research is recommended in the employees' acceptance of the change and the effect that the implementation of the QMS will have on the culture and productivity of the unit.

REFERENCE LIST

- Belack, C., Di Filippo, D. & Di Filippo, I. 2019. Cognitive Readiness in Project Teams: Reducing Project Complexity and Increasing Success in Project Management: CRC Press.
- Bogan, C.B. 2017. Change Readiness and Willingness to Adopt Information Security Technology: A Quantitative Study. Capella University.
- Bouckennooghe, D., Devos, G. & Van den Broeck, H. 2009. Organisational change questionnaire—climate of change, processes and readiness: Development of a new instrument. *The Journal of Psychology*, 143(6):559-599.
- Buchanan, D. & Badham, R. 2020. Power, politics and organisational change: SAGE Publications Limited.
- Bullock, R. & Batten, D. 1985. It's just a phase we're going through: a review and synthesis of OD phase analysis. *Group & Organisation Studies*, 10(4):383-412.
- Cameron, E. & Green, M. 2019. Making sense of change management: A complete guide to the models, tools and techniques of organisational change: Kogan Page Publishers.
- Corr, C.A. 2020. Elisabeth Kübler-Ross and the “five stages” model in a sampling of recent American textbooks. *OMEGA-Journal of Death and Dying*, 82(2):294-322.
- Creswell, J. 2018. Research design. 5th International student edition: Los Angeles, USA: SAGE.
- Davenport, T.H. 1993. Process innovation: reengineering work through information technology: Harvard Business Press. (p11)
- de Bruin, T. & Rosemann, M. 2007. Using the Delphi technique to identify BPM capability areas.
- Dinçer, H., Hacıoğlu, Ü. & Yuksel, S. 2018. Strategic design and innovative thinking in business operations : the role of business culture and risk management: Springer.
- Dudovskiy, J. 2018. The ultimate guide to writing a dissertation in business studies: A step by step assistance [eBook]. *Published by research-methodology. net*.
- Fletcher, J. & Wind, A.P. 2014. The evolving definition of cognitive readiness for military operations. Teaching and measuring cognitive readiness. Springer. p. 25-52).
- Gatenio-Kalush, M. & Cohen, E. 2019. Creating “a Safe Haven”: Emotion-Regulation Strategies Employed by Mothers and Young Children Exposed to Recurrent Political Violence. *Journal of Child & Adolescent Trauma*:1-11.

Gliem, J.A. & Gliem, R.R. 2003. Calculating, interpreting and reporting Cronbach's alpha reliability coefficient for Likert-type scales. (In organised by Midwest Research-to-Practice Conference in Adult, Continuing and Community

Grigorov, G. 2020. Analysis of McGregor, Alderfer and Murray's motivation theories and their applicability in the military. *Science. Business. Society.*, 5(2):76-78.

Hammer, M. 2007. The Process Audit. *Harvard Business Review*, 85(4):111-123.

Hashem, G. 2019. Organizational enablers of business process reengineering implementation. *International Journal of Productivity and Performance Management*.

Hinkin, T.R. 1998. A brief tutorial on the development of measures for use in survey questionnaires. *Organisational research methods*, 1(1):104-121.

Hogan, S.J. & Coote, L.V. 2014. Organizational culture, innovation, and performance: A test of Schein's model. *Journal of business research*, 67(8):1609-1621.

Hon, L.C. & Grunig, J.E. 1999. Guidelines for measuring relationships in public relations: Gainesville, FL: Institute for public relations.

Ismail, D.H., Asmawi, M. & Widodo, S.E. 2020. The Effect of Organizational Culture, Leadership Style, and Trust to Organizational Commitments of LP3I Polytechnic Jakarta Lectures. *IJHCM (International Journal of Human Capital Management)*, 4(1):16-25.

Jie, C.T., Zu Yee, E.W. & Wok, S. 2017. Predicting factors of job satisfaction through organizational culture: A case of Malaysian private learning institution. *Jurnal Komunikasi: Malaysian Journal of Communication*, 33(3).

Kerpedzhiev, G.D., König, U.M., Röglinger, M. & Rosemann, M. 2020. An exploration into future business process management capabilities in view of digitalization. *Business & Information Systems Engineering*:1-14.

Kirrane, M., Lennon, M., O'Connor, C. & Fu, N. 2017. Linking perceived management support with employees' readiness for change: the mediating role of psychological capital. *Journal of Change Management*, 17(1):47-66.

Kotter, J.P. 1995. Leading change: Why transformation efforts fail.

Kucińska-Landwójtowicz, A. 2019. Organizational Maturity Models-Review And Classification. (In. CBU International Conference Proceedings organised by. p. 186-192).

Lewis, L. & Sahay, S. 2019. Organisational change: Wiley Online Library.

Manzano, P.C. 2020. The Relationship Between Authentic Leadership and Organisational Change Readiness: The Mediating Role of Psychological Safety. San Jose State University.

- Matthysen, M. & Harris, C. 2018. The relationship between readiness to change and work engagement: A case study in an accounting firm undergoing change. *SA Journal of Human Resource Management*, 16(1):1-11.
- Momoh, A., Roy, R. & Shehab, E. 2010. Challenges in enterprise resource planning implementation: State-of-the-art. *Business Process Management Journal*.
- Morgan Jr, B.B., Glickman, A.S., Woodard, E.A., Blaiwes, A.S. & Salas, E. 1986. Measurement of team behaviors in a Navy environment.
- Nordsieck, F. 1932. Die schaubildliche Erfassung und Untersuchung der Betriebsorganisation,. Vol. 4. Poeschel, Stuttgart.
- Parlar, H., Polatcan, M. & Cansoy, R. 2018. The Role of Trust in Principals in Readiness for Change Within Schools. (In. International Symposium on Chaos, Complexity and Leadership organised by Springer. p. 181-191).
- PISTOL, L.-B. 2020. An in-depth analysis of Gareth Morgan's theory—metaphors of the organisation.
- Rafferty, A.E. & Minbashian, A. 2019. Cognitive beliefs and positive emotions about change: Relationships with employee change readiness and change-supportive behaviors. *Human Relations*, 72(10):1623-1650.
- Rawlins, B.R. 2008. Measuring the relationship between organizational transparency and employee trust.
- Rizoto-Vidala-Pesoa, L.M. & Kuzņecova, O. 2017. The Role of the Super User in Achieving Business Process Management Maturity. *Information Technology and Management Science*, 20(1):74-78.
- Sandhusen, R.L. 2000. Baronsll s Marketing—A true-to-life hypothetical company presented Business Review Books.
- Schallmo, D.R.A., Brecht, L. & Ramosaj, B. 2018. Process Innovation: Enabling Change by Technology : Basic Principles and Methodology: A Management Manual and Textbook with Exercises and Review Questions: Springer Berlin Heidelberg.
- Schein, E. 2010. Organizational culture and leadership (Vol. 2).-ohn Wiley & Sons.
- Schmiedel, T., Recker, J. & Brocke, J.v. 2019. The relation between BPM culture, BPM methods and process performance: Evidence from quantitative field studies. *Information & Management*:103175.
- Struwig, M., Struwig, F. & Stead, G. 2001. Planning, reporting & designing research: Pearson South Africa.

Taylor, M. 2019. Overcome the barriers to successful team and organisational change - part two. *HR Future*, 2019(Aug 2019):36-37.

Vom Brocke, J. & Rosemann, M. 2015. Handbook on Business Process Management 1. London: Springer.

Weiner, B.J. 2020. A theory of organisational readiness for change. Handbook on Implementation Science. Edward Elgar Publishing.

Wu, L.-F., Huang, C., Huang, W.-C. & Du, P.-L. 2019. Aligning organizational culture and operations strategy to improve innovation outcomes. *Journal of Organizational Change Management*.

Yue, C.A., Men, L.R. & Ferguson, M.A. 2019. Bridging transformational leadership, transparent communication and employee openness to change: The mediating role of trust. *Public relations review*, 45(3):101779.

Zayim, M. 2010. Investigating the relationship between primary and secondary level public school teachers' readiness for change and perceived organizational trust. *Unpublished doctoral dissertation*). Middle East Technical University, Ankara, Turkey.

Zorn, T., Christensen, L.T. & Cheney, G. 1999. Do we really want constant change?: Beyond the bottom line.

APPENDICES

Appendix A PEMM Evaluation

		E - 1	E - 2	E - 3	E - 4
Leadership	Awareness	The enterprise's senior executive team recognizes the need to improve operational performance but has only a limited understanding of the power of business processes.	At least one senior executive deeply understands the business process concept, how the enterprise can use it to improve performance, and what is involved in implementing it.	The senior executive team views the enterprise in process terms and has developed a vision of the enterprise and its processes.	The senior executive team sees its own work in process terms and perceives process management not as a project but as a way of managing the business.
	Alignment	The leadership of the process program lies in the middle management ranks.	A senior executive has taken leadership of, and responsibility for, the process program.	There is strong alignment in the senior executive team regarding the process program. There is also a network of people throughout the enterprise helping to promote process efforts.	People throughout the enterprise exhibit enthusiasm for process management and play leadership roles in process efforts.
	Behavior	A senior executive endorses and invests in operational improvement.	A senior executive has publicly set stretch performance goals in customer terms and is prepared to commit resources, make deep changes, and remove roadblocks in order to achieve those goals.	Senior executives operate as a team, manage the enterprise through its processes, and are actively engaged in the process program.	The members of the senior executive team perform their own work as processes, center strategic planning on processes, and develop new business opportunities based on high-performance processes.
	Style	The senior executive team has started shifting from a top-down, hierarchical style to an open, collaborative style.	The senior executive team leading the process program is passionate about the need to change and about process as the key tool for change.	The senior executive team has delegated control and authority to process owners and process performers.	The senior executive team exercises leadership through vision and influence rather than command and control.
Culture	Teamwork	Teamwork is project focused, occasional, and atypical.	The enterprise commonly uses cross-functional project teams for improvement efforts.	Teamwork is the norm among process performers and is commonplace among managers.	Teamwork with customers and suppliers is commonplace.
	Customer Focus	There is a widespread belief that customer focus is important, but there is limited appreciation of what that means. There is also uncertainty and conflict about how to meet customers' needs.	Employees realize that the purpose of their work is to deliver extraordinary customer value.	Employees understand that customers demand uniform excellence and a seamless experience.	Employees focus on collaborating with trading partners to meet the needs of final customers.
	Responsibility	Accountability for results rests with managers.	Frontline personnel begin to take ownership of results.	Employees feel accountable for enterprise results.	Employees feel a sense of mission in serving customers and achieving ever-better performance.
	Attitude Toward Change	There is growing acceptance in the enterprise about the need to make modest change.	Employees are prepared for significant change in how work is performed.	Employees are ready for major multidimensional change.	Employees recognize change as inevitable and embrace it as a regular phenomenon.
Expertise	People	A small group of people has a deep appreciation for the power of processes.	A cadre of experts has skills in process redesign and implementation, project management, communications, and change management.	A cadre of experts has skills in large-scale change management and enterprise transformation.	Substantial numbers of people with skills in process redesign and implementation, project management, program management, and change management are present across the enterprise. A formal process for developing and maintaining that skill base is also in place.
	Methodology	The enterprise uses one or more methodologies for solving execution problems and making incremental process improvements.	Process redesign teams have access to a basic methodology for process redesign.	The enterprise has developed and standardized a formal process for process redesign and has integrated it with a standard process for process improvement.	Process management and redesign have become core competencies and are embedded in a formal system that includes environment scanning, change planning, implementation, and process-centered innovation.
Governance	Process Model	The enterprise has identified some business processes.	The enterprise has developed a complete enterprise process model, and the senior executive team has accepted it.	The enterprise process model has been communicated throughout the enterprise, is used to drive project prioritization, and is linked to enterprise-level technologies and data architectures.	The enterprise has extended its process model to connect with those of customers and suppliers. It also uses the model in strategy development.
	Accountability	Functional managers are responsible for performance, project managers for improvement projects.	Process owners have accountability for individual processes, and a steering committee is responsible for the enterprise's overall progress with processes.	Process owners share accountability for the enterprise's performance.	A process council operates as the most senior management body; performers share accountability for enterprise performance; and the enterprise has established steering committees with customers and suppliers to drive interenterprise process change.
	Integration	One or more groups advocate and support possibly distinct operational improvement techniques.	An informal coordinating body provides needed program management while a steering committee allocates resources for process redesign projects.	A formal program management office, headed by a chief process officer, coordinates and integrates all process projects, and a process council manages inter-process integration issues. The enterprise manages and deploys all process improvement techniques and tools in an integrated manner.	Process owners work with their counterparts in customer and supplier enterprises to drive interenterprise process integration.

Assessment score colors



		P - 1	P - 2	P - 3	P - 4
Design	Purpose	The process has not been designed on an end-to-end basis. Functional managers use the legacy design primarily as a context for functional performance improvement.	The process has been redesigned from end to end in order to optimize its performance.	The process has been designed to fit with other enterprise processes and with the enterprise's IT systems in order to optimize the enterprise's performance.	The process has been designed to fit with customer and supplier processes in order to optimize interenterprise performance.
	Context	The process's inputs, outputs, suppliers, and customers have been identified.	The needs of the process's customers are known and agreed upon.	The process owner and the owners of the other processes with which the process interfaces have established mutual performance expectations.	The process owner and the owners of customer and supplier processes with which the process interfaces have established mutual performance expectations.
	Documentation	The documentation of the process is primarily functional, but it identifies the interconnections among the organizations involved in executing the process.	There is end-to-end documentation of the process design.	The process documentation describes the process's inter- faces with, and expectations of, other processes and links the process to the enterprise's system and data architecture.	An electronic representation of the process design supports its performance and management and allows analysis of environmental changes and process reconfigurations.
Performers	Knowledge	Performers can name the process they execute and identify the key metrics of its performance.	Performers can describe the process's overall flow; how their work affects customers, other employees in the process, and the process's performance; and the required and actual performance levels.	Performers are familiar both with fundamental business concepts and with the drivers of enterprise performance and can describe how their work affects other processes and the enterprise's performance.	Performers are familiar with the enterprise's industry and its trends and can describe how their work affects inter- enterprise performance.
	Skills	Performers are skilled in problem solving and process improvement techniques.	Performers are skilled in teamwork and self-management.	Performers are skilled at business decision making.	Performers are skilled at change management and change implementation.
	Behavior	Performers have some allegiance to the process, but owe primary allegiance to their function.	Performers try to follow the process design, perform it correctly, and work in ways that will enable other people who execute the process to do their work effectively.	Performers strive to ensure that the process delivers the results needed to achieve the enterprise's goals.	Performers look for signs that the process should change, and they propose improvements to the process.
Owner	Identity	The process owner is an individual or a group informally charged with improving the process's performance.	Enterprise leadership has created an official process owner role and has filled the position with a senior manager who has clout and credibility.	The process comes first for the owner in terms of time allocation, mind share, and personal goals.	The process owner is a member of the enterprise's most senior decision-making body.
	Activities	The process owner identifies and documents the process, communicates it to all the performers, and sponsors small-scale change projects.	The process owner articulates the process's performance goals and a vision of its future; sponsors redesign and improvement efforts; plans their implementation; and ensures compliance with the process design.	The process owner works with other process owners to integrate processes to achieve the enterprise's goals.	The process owner develops a rolling strategic plan for the process, participates in enterprise-level strategic planning, and collaborates with his or her counterparts working for customers and suppliers to sponsor interenterprise process-redesign initiatives.
	Authority	The process owner lobbies for the process but can only encourage functional managers to make changes.	The process owner can convene a process redesign team and implement the new design and has some control over the technology budget for the process.	The process owner controls the IT systems that support the process and any projects that change the process and has some influence over personnel assignments and evaluations as well as the process's budget.	The process owner controls the process's budget and exerts strong influence over personnel assignments and evaluations.
Infrastructure	Information Systems	Fragmented legacy IT systems support the process.	An IT system constructed from functional components sup- ports the process.	An integrated IT system, designed with the process in mind and adhering to enterprise standards, supports the process.	An IT system with a modular architecture that adheres to industry standards for interenterprise communication sup- ports the process.
	Human Resource Systems	Functional managers reward the attainment of functional excellence and the resolution of functional problems in a process context.	The process's design drives role definitions, job descriptions, and competency profiles. Job training is based on process documentation.	Hiring, development, reward, and recognition systems emphasize the process's needs and results and balance them against the enterprise's needs.	Hiring, development, reward, and recognition systems rein- force the importance of intra- and interenterprise collaboration, personal learning, and organizational change.
Metrics	Definition	The process has some basic cost and quality metrics.	The process has end-to-end process metrics derived from customer requirements.	The process's metrics as well as cross-process metrics have been derived from the enterprise's strategic goals.	The process's metrics have been derived from interenterprise goals.
	Uses	Managers use the process's metrics to track its performance, identify root causes of faulty performance, and drive functional improvements.	Managers use the process's metrics to compare its performance to benchmarks, best-in-class performance, and customer needs and to set performance targets.	Managers present the metrics to process performers for awareness and motivation. They use dashboards based on the metrics for day-to-day management of the process.	Managers regularly review and refresh the process's metrics and targets and use them in strategic planning.

Assessment score colors



Appendix B - Questionnaire

Dimension		Nr	Question						
Process of change	Dimension: Quality of change communication	Q03	I am regularly informed on how the change is going	5 if YES; 1 if NO	1	2	3	4	5
		Q12	There is good communication between project leaders and staff members about the organization's policy toward changes	5 if YES; 1 if NO	1	2	3	4	5
		Q22	Information provided on change is clear	5 if YES; 1 if NO	1	2	3	4	5
		Q36	Information concerning the changes reaches us mostly as rumours	5 if YES; 1 if NO	1	2	3	4	5
		Q47	We are sufficiently informed of the progress of change	5 if YES; 1 if NO	1	2	3	4	5
		Q65	Corporate management team keeps all departments informed about its decisions	5 if YES; 1 if NO	1	2	3	4	5
		Q76	Two-way communication between the corporate management team and the departments is very good	5 if YES; 1 if NO	1	2	3	4	5
		Q20	Corporate management team clearly explains the necessity of the change	5 if YES; 1 if NO	1	2	3	4	5
	Participation	Q05	Changes are always discussed with all people concerned	5 if YES; 1 if NO	1	2	3	4	5
		Q11	Those who implement change, have no say in developing the proposals	5 if YES; 1 if NO	1	2	3	4	5
		Q25	Decisions concerning work are taken in consultation with the staff who are affected	5 if YES; 1 if NO	1	2	3	4	5
		Q34	My department's management team takes account of the staff's remarks	5 if YES; 1 if NO	1	2	3	4	5
		Q35	Departments are consulted about the change sufficiently	5 if YES; 1 if NO	1	2	3	4	5

		Q42	Staff members were consulted about the reasons for change	5 if YES; 1 if NO	1	2	3	4	5
		Q50	Front line staff and office workers can raise topics for discussion	5 if YES; 1 if NO	1	2	3	4	5
		Q51	Our department provide sufficient time for consultation	5 if YES; 1 if NO	1	2	3	4	5
		Q71	It is possible to talk about outmoded regulations and ways of working	5 if YES; 1 if NO	1	2	3	4	5
		Q74	The way change is implemented leaves little room for personal input	5 if YES; 1 if NO	1	2	3	4	5
		Q77	Staff members are sufficiently involved in the implementation of the changes by our department's senior managers	5 if YES; 1 if NO	1	2	3	4	5
	Attitude of top management towards change	Q17	Corporate management team has a positive vision of the future	5 if YES; 1 if NO	1	2	3	4	5
		Q66	Corporate management team is actively involved with the changes	5 if YES; 1 if NO	1	2	3	4	5
		Q69	Corporate management team supports the change process unconditionally	5 if YES; 1 if NO	1	2	3	4	5
	Support by supervisors	Q101	Our department's senior managers pay sufficient attention to the personal consequences that the changes could have for their staff members	5 if YES; 1 if NO	1	2	3	4	5
		Q37	Our department's senior managers coach us very well about implementing change	5 if YES; 1 if NO	1	2	3	4	5
		Q38	Our department's senior managers have trouble in adapting their leadership styles to the changes	5 if YES; 1 if NO	1	2	3	4	5
		Q15	My manager does not seem very keen to help me find a solution if I have a problem	5 if YES; 1 if NO	1	2	3	4	5

		Q31	If I experience any problems, I can always turn on my manager for help	5 if YES; 1 if NO	1	2	3	4	5
		Q40	My manager can place herself/himself in my position	5 if YES; 1 if NO	1	2	3	4	5
		Q60	My manager encourages me to do things that I have never done before	5 if YES; 1 if NO	1	2	3	4	5
Climate of change or internal context	Trust in leadership	Q19	Corporate management team consistently implements its policies in all departments	5 if YES; 1 if NO	1	2	3	4	5
		Q44	Corporate management team fulfils its promises	5 if YES; 1 if NO	1	2	3	4	5
		Q58	If I make mistakes, my manager holds them against me	5 if YES; 1 if NO	1	2	3	4	5
	Politicking (POL)	Q08	Within our organization, power games between the departments play an important role	5 if YES; 1 if NO	1	2	3	4	5
		Q09	Staff members are sometimes taken advantage of in our organization	5 if YES; 1 if NO	1	2	3	4	5
		Q30	In our organization, favouritism is an important way to achieve something	5 if YES; 1 if NO	1	2	3	4	5
	Cohesion	Q02	It is difficult to ask help from my colleagues	5 if YES; 1 if NO	1	2	3	4	5
		Q14	There is a strong rivalry between colleagues in my department	5 if YES; 1 if NO	1	2	3	4	5
		Q24	I doubt whether all of my colleagues are sufficiently competent	5 if YES; 1 if NO	1	2	3	4	5
		Q48	I have confidence in my colleagues	5 if YES; 1 if NO	1	2	3	4	5
		Q61	My department is very open	5 if YES; 1 if NO	1	2	3	4	5
Readiness for change	Emotional readiness for change (EMRE)	Q04	I have a good feeling about the change project	5 if YES; 1 if NO	1	2	3	4	5
		Q33	I experience the change as a positive process	5 if YES; 1 if NO	1	2	3	4	5
		Q75	I find the change refreshing	5 if YES; 1 if NO	1	2	3	4	5

		Q55	I am somewhat resistant to change	5 if YES; 1 if NO	1	2	3	4	5
		Q73	I am quite reluctant to accommodate and incorporate changes into my work	5 if YES; 1 if NO	1	2	3	4	5
	Cognitive readiness for change (COGRE)	Q41	I think that most changes will have a negative effect on the clients we serve	5 if YES; 1 if NO	1	2	3	4	5
		Q59	Plans for future improvement will not come too much	5 if YES; 1 if NO	1	2	3	4	5
		Q62	Most change projects that are supposed to solve problems around here will not do much good	5 if YES; 1 if NO	1	2	3	4	5
		Q39	The change will improve work	5 if YES; 1 if NO	1	2	3	4	5
		Q56	The change will simplify work	5 if YES; 1 if NO	1	2	3	4	5
	Intentional readiness for change (INRE)	Q18	I want to devote myself to the process of change	5 if YES; 1 if NO	1	2	3	4	5
		Q57	I am willing to make a significant contribution to the change	5 if YES; 1 if NO	1	2	3	4	5
		Q67	I am willing to put energy into the process of change	5 if YES; 1 if NO	1	2	3	4	5

Appendix C

TITLE OF THE RESEARCH STUDY: Investigating the readiness to accept the implementation of new business processes in the support service industry **ETHICS REFERENCE NUMBERS:** NWU-00695-20-A4
PRINCIPAL INVESTIGATOR: Dr Nelda Mouton **POSTGRADUATE STUDENT:** CE Lloyd
ADDRESS: Private Bag X6001, Potchefstroom, South Africa, 2520 **CONTACT NUMBER:** 018 285 2824

Declaration by participant

By selecting Agree and Continue below, I agree to take part in the research study titled: Investigating the readiness to accept the implementation of new business processes in the support service industry.

I declare that:

I have read this information/it was explained to me by a trusted person in a language with which I am fluent and comfortable. ·

The research was clearly explained to me. ·

I have had a chance to ask questions to both the person getting the consent from me, as well as the researcher and all my questions have been answered. ·

I understand that taking part in this study is voluntary and I have not been pressurized to take part. ·

I may choose to leave the study at any time and will not be handled in a negative way if I do so. I may be asked to leave the study before it has finished, if the researcher feels it is in the best interest, or if I do not follow the study plan, as agreed to.

In which level are you working?									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Management	Administration	1	Management	25	Administration	2.83	3	0.47	0.22
Please indicate your age									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
20 - 30	51 - 60	4	51 - 60	11	31 - 40	2.28	2	1	0.99

In what department are you working?									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Business Development	Online learn	3	Business Development	22	Operations	2.03	2	0.5	0.25
On which campus are you working									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Mahikeng Campus	Potchefstroom Campus	2	Vaal Campus	23	Potchefstroom Campu s	2.66	3	0.72	0.52
Please indicate your gender									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Male	Female	7	Male	22	Female	1.76	2	0.44	0.19
Q02 It is difficult to ask help from my colleagues									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Agree	2	Agree	9	Neutral	2.19	2	0.98	0.96
Q03 I am regularly informed on how the change is going									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance

From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly agree	10	Disagree	2.38	2	1.13	1.29
Q04 I have a good feeling about the change project									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly disagree	10	Neutral	3.19	3	0.98	0.96
Q05 Changes are always discussed with all people concerned									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Agree	4	Strongly disagree, Agree	13	Disagree	2.35	2	0.94	0.88
Q08 Within our organization, power games between the departments play an important role									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly disagree, Disagree	12	Agree	3.65	4	0.94	0.88
Q09 Staff members are sometimes taken advantage of in our organization									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				

Strongly disagree	Strongly agree	1	Strongly disagree	10	Neutral	3.42	3	1.03	1.05
Q11 Those who implement change, have no say in developing the proposals									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Disagree	12	Neutral	3.42	3	1.1	1.21
Q12 There is good communication between project leaders and staff members about the organization's policy toward changes									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	2	Agree, Strongly agree	12	Disagree	2.46	2	1.1	1.22
Q14 There is a strong rivalry between colleagues in my department									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly disagree, Strongly agree	11	Neutral	2.96	3	0.92	0.84
Q15 My manager does not seem very keen to help me find a solution if I have a problem									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Agree	4	Agree	9	Strongly	2.15	2	1.08	1.18

					disagree				
Q17 Corporate management team has a positive vision of the future									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Disagree	Strongly agree	4	Strongly agree	9	Neutral	3.42	3	0.99	0.97
Q18 I want to devote myself to the process of change									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly disagree	11	Agree	3.88	4	0.95	0.91
Q19 Corporate management team consistently implements its policies in all departments									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly disagree, Strongly agree	11	Disagree	2.77	3	0.95	0.9
Q20 Corporate management team clearly explains the necessity of the change									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly disagree	15	Disagree	2.62	2	1.02	1.05

Q22 Information provided on change is clear									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Agree	1	Strongly disagree	14	Disagree	2.62	2	0.9	0.81
Q24 I doubt whether all of my colleagues are sufficiently competent									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	2	Strongly disagree, Disagree	9	Neutral, Agree	3.42	3.5	1.1	1.21
Q25 Decisions concerning work are taken in consultation with the staff who are affected									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly disagree	13	Disagree	2.85	2	1.16	1.34
Q30 In our organization, favoritism is an important way to achieve something									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly disagree	10	Neutral	3.54	3	1.14	1.3
Q31 If I experience any problems, I can always turn on my manager for help									

Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	2	Strongly disagree, Disagree	10	Strongly agree	3.77	4	1.27	1.62
Q33 I experience the change as a positive process									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly disagree	11	Neutral	3.38	3	1.02	1.05
Q34 My department's management team takes account of the staff's remarks									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Disagree	Agree	4	Disagree	12	Agree	3.31	3	0.74	0.54
Q35 Departments are consulted about the change sufficiently									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly agree	13	Disagree	2.58	2	0.99	0.97
Q36 Information concerning the changes reaches us mostly as rumours									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				

Disagree	Strongly agree	3	Disagree, Neutral	11	Agree	4	4	0.98	0.96
Q37 Our department's senior managers coach us very well about implementing change									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly agree	10	Neutral	2.81	3	0.98	0.96
Q38 Our department's senior managers have trouble in adapting their leadership styles to the changes									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly disagree	11	Neutral	3.15	3	0.97	0.94
Q39 The change will improve work									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Disagree	Strongly agree	1	Disagree	12	Neutral	3.62	3.5	0.8	0.65
Q40 My manager can place herself/himself in my position									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly disagree	9	Neutral	3.12	3	1.07	1.15

Q41 I think that most changes will have a negative effect on the clients we serve									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	3	Agree	9	Neutral	2.88	3	1.28	1.63
Q42 Staff members were consulted about the reasons for change									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Agree	5	Strongly disagree, Agree	10	Disagree	2.42	2	1.03	1.05
Q44 Corporate management team fulfils its promises									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Agree	2	Strongly disagree	15	Disagree	2.38	2	0.8	0.65
Q47 We are sufficiently informed of the progress of change									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Agree	2	Strongly disagree	12	Disagree	2.58	2	0.9	0.81
Q48 I have confidence in my colleagues									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance

From	To	Frequency	Value	Frequency	Value				
Disagree	Strongly agree	3	Disagree, Strongly agree	10	Neutral, Agree	3.5	3.5	0.86	0.74
Q50 Front line staff and office workers can raise topics for discussion									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly agree	10	Agree	3.04	3	1.11	1.24
Q51 Our department provide sufficient time for consultation									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Agree	2	Strongly disagree	10	Disagree	2.69	3	0.93	0.86
Q55 I am somewhat resistant to change									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Agree	1	Agree	14	Disagree	2.27	2	0.72	0.52
Q56 The change will simplify work									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly disagree	9	Neutral	3.42	3	1.1	1.21

Q57 I am willing to make a significant contribution to the change									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Neutral	Strongly agree	4	Neutral	16	Agree	4.08	4	0.63	0.39
Q58 If I make mistakes, my manager holds them against me									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Agree	2	Agree	11	Disagree	2.12	2	0.91	0.83
Q59 Plans for future improvement will not come too much									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Agree	1	Disagree	15	Neutral	3.12	3	0.82	0.67
Q60 My manager encourages me to do things that I have never done before									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly disagree, Disagree	14	Agree	3.73	4	0.92	0.84
Q61 My department is very open									

Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	2	Strongly agree	9	Agree	3.04	3	1.22	1.48
Q62 Most change projects that are supposed to solve problems around here will not do much good									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Agree	2	Strongly disagree	10	Neutral	2.85	3	0.92	0.86
Q65 Corporate management team keeps all departments informed about its decisions									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly agree	14	Disagree	2.46	2	0.9	0.82
Q66 Corporate management team is actively involved with the changes									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly disagree, Strongly agree	10	Neutral	2.92	3	0.93	0.87
Q67 I am willing to put energy into the process of change									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				

Neutral	Strongly agree	3	Neutral	18	Agree	4.08	4	0.56	0.31
Q69 Corporate management team supports the change process unconditionally									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Disagree	Strongly agree	1	Strongly agree	13	Neutral	3.15	3	0.78	0.62
Q71 It is possible to talk about outmoded regulations and ways of working									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly disagree, Strongly agree	11	Neutral	3.19	3	0.9	0.8
Q73 I am quite reluctant to accommodate and incorporate changes into my work									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly disagree, Agree	15	Disagree	2.54	2	0.95	0.9
Q74 The way change is implemented leaves little room for personal input									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Disagree	Strongly agree	2	Strongly agree	11	Agree	3.46	3.5	0.81	0.66

Q75 I find the change refreshing									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Disagree	Strongly agree	3	Disagree	12	Neutral	3.46	3	0.9	0.82
Q76 Two-way communication between the corporate management team and the departments is very good									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly agree	9	Disagree, Neutral	2.65	3	1.02	1.04
Q77 Staff members are sufficiently involved in the implementation of the changes by our department's senior managers									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Agree	3	Strongly disagree, Agree	12	Disagree	2.42	2	0.86	0.73
Q101 Our department's senior managers pay sufficient attention to the personal consequences that the changes could have for their staff members									
Range		Less Frequent		More Frequent		Mean	Median	Standard Deviation	Variance
From	To	Frequency	Value	Frequency	Value				
Strongly disagree	Strongly agree	1	Strongly agree	9	Neutral	2.85	3	1.01	1.02