

**STRATEGIC PLANNING AND ITS ALIGNMENT WITH THE BUDGETING  
PROCESS IN SELECTED NATIONAL GOVERNMENT DEPARTMENTS**



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## **DECLARATION**

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This work has not been previously accepted in substance for any degree, neither is it concurrently submitted in candidature for any degree.

### **STATEMENT 1**

This dissertation is submitted in partial fulfilment of the requirements for the degree, Master of Business Administration.

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

### **STATEMENT 2**

The dissertation is the result of my own independent work/investigation, except where otherwise stated. Other sources are acknowledged by giving explicit references. A bibliography is appended.

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## **DEDICATION**

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I dedicate this research study to my late father, Mmbengwa Frank Radzilani Tshikovhi, who made me the person I am today. I also dedicate the research to my mother, Tshimangadzo Tshinakaho Radzilani Tshikovhi, who through her vision understands the benefits of education, supports my studies and encourages my success. I also extend my dedication to my children, husband, brother and his family for the support and understanding they have shown during my studies.

Finally, I dedicate this research to God Almighty who gave me the strength, wisdom, grace and favour to persist and finish this research.

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## ABSTRACT

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South African government departments, through the relevant executing authority, are required to develop strategic plans in terms of the Public Service Amendment Act (Act No. 30 of 2007) and Public Finance Management Amendment Act (Act No. 29 of 1999). In terms of Treasury Regulation, 2005 section 6, the government departments are further required to comply with budgetary requirements. The key question in this research was to what extent is the strategic planning process aligned to the budgeting process. In light of the research question, the research objective was to investigate the alignment of the strategic planning and budgeting processes in the selected national government departments.

In order to achieve the aforementioned research objective, structured questionnaires were distributed to 300 senior managers in the selected government departments of which 203 were completed and retrieved. The government departments that participated in the study were selected using the non-probability convenient sampling technique. A quantitative approach was followed, in which case a survey was used to garner data, which were analysed using statistical analytical methods, such as the means, standard deviations, exploratory factor analysis, correlation analysis and regression analysis.

The five factors of strategic planning were extracted from the strategic planning questionnaire data and were coined strategic analysis and assessment (SAA), environmental impact assessment (EIA), goal setting (GS), responsibilities and resource allocation (RRA), and information system (IS). Correlation analysis indicated that there was a positive relationship between the five factors of the strategic planning process and the budgeting process. The regression analysis results confirmed the existence of a predictive relationship between the five factors of strategic planning and the budgeting process. The conclusion from this finding confirmed the alignment of strategic planning with the budgeting process in the selected national government departments.

The internal consistency of the measuring instrument was tested by means of Cronbach's alpha coefficient, while its validity was measured using face validity, content validity, construct validity, convergent validity and predictive validity.

In spite of the positive correlation and regression analyses, recommendations were made to improve the strategic planning and budgeting processes.

**Key words:** strategic planning, budgeting, budgeting process, strategic analysis and assessment, environmental impact assessment, goal setting, allocation of resources and information systems

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# **CHAPTER 1**

## **INTRODUCTION AND BACKGROUND TO THE STUDY**

### **1.1 INTRODUCTION**

Countries that have grown rapidly over two or three generations have often had clear strategies that demanded strategic choices and careful sequencing of policies and implementation (RSA 2009:10). Often, long-running growth and development requires a long-term vision of an ultimate goal, a corresponding investment in people, infrastructure and the means of production for successive periods. It means continually identifying the activities that will act as key drivers to reach the objective (RSA 2009:13).

According to Poister (2010:246), if public managers are to anticipate and manage change effectively, they will need to adopt strategic planning with a view to addressing new issues that are likely to emerge with increasing rapidity. However, Poister (2010:246) cautions that this will require transitioning from strategic planning to the broader process of strategic management, which involves continuously managing an agency's overall strategic agenda and ensuring effective implementation of strategies. This will be the case since strategic management is viewed as the appropriate and reasonable integration of strategic planning and continuous implementation across an organisation (or other entity) to enhance the fulfilment of the mission, meeting of mandates, continuous learning and sustained creation of public value (Bryson 2010:256). The concept of strategic planning in this study was used to encapsulate key strategic activities, namely planning, implementation and control/evaluation.

Since the 1980s, strategic planning has been widely adopted by public, private and non-profit organisations (Bryson 2010:255). Strategic planning is defined as "a deliberate, disciplined approach to producing fundamental decisions and actions that shape and guide organisations" (Bryson 2011:78). Strategic planning improves effectiveness and creates public value in different ways, such as aligning budgets with strategic priorities, allocating resources to fund new strategic initiatives and challenging operating units to show how their budget proposals advance strategy (Poister 2010:249). According to Bryson (2010:256), strategic planning requires developing an appropriate formal strategic management system in practice and linking budgeting, performance measurement and performance management to meet mandates. Hu, Kapucu and O'Byrne (2014:12) concur that in order to maximise the benefits of strategic

planning, organisations need to integrate their strategic plan into their budgeting process in order to develop clear implementation plans and to evaluate the performance by linking strategic plans with performance management. The benefits may include improved decision making, enhanced organisational effectiveness, responsiveness, resilience, enhanced effectiveness of broader societal systems, improved organisational legitimacy and direct benefits for the people involved (Hu *et al.*, 2014:12).

Strategic planning and budgeting provide managers with an opportunity to rejuvenate their organisations (Libby & Lindsay 2010:56). The strategic planning and budgeting processes translate qualitative mission statements and corporate strategies into action plans, link the short term with the long term, bring together managers from different hierarchical levels and from different functional areas and at the same time provide continuity by the sheer regularity of the process (Libby & Lindsay 2010:56). Budgeting appears to be a relevant type of management control process through which to explore the strategic competence of accountants and middle managers (Faure & Rouleau 2011:168).

In the case of government departments, strategic planning and budgeting are the outcome of an annual planning process, which sets targets for the first year as well as projections for the rest of the three-year period (AGSA 2013:5). The strategic elements such as vision, mission and values, represent the long-term direction that guide the annual planning process and are normally reviewed over five-year periods (AGSA 2013:5). Strategic plans describe specific tactics, assign responsibilities, identify how resources will be allocated, schedule activities and efforts and specify various targets (Miller 1998:48). Since every plan should be accompanied by a budget, this is supposed to estimate the amount of funding needed to execute the plan (Kroon 1996:127). In this way, a budget gets to be aligned to the plan.

Alignment is the capability of the organisation to link planning, budgeting and shareholder value creation in a process that synchronises organisational activities and creates synergies (Kaplan & Norton 2006:123). Alignment improves the traditional planning and budgeting process and provides a better response to the ever-changing and complex business environment (Amuenje 2009:19). Miller and Galeaz (2007:39) state that leading financial services companies continue to look for overall alignment of targets with the organisational strategy and value drivers. This study seeks to investigate strategic planning and its alignment with the budgeting process.

## **1.2 THEORETICAL FRAMEWORK OF THE STUDY**

This study was grounded on the resources dependency theory (RDT). RDT is the study of how the resources of organisations affect the internal processes and performance of organisations. The procurement of resources is an important tenet of both the strategic and tactical management of any company. Nevertheless, the theory of this importance was not formalised until the 1970s, with the publication of *The External Control of Organisations: A Resource Dependence Perspective* (Pfeffer & Salancik 1978:3).

Resource dependence theory has become one of the most influential theories in organisational theory and strategic management. RDT characterises the corporation as an open system, dependent on contingencies in the external environment (Pfeffer 2003:5). Using this theory, it was illustrated how the external and internal environment of the selected government departments influenced the selection of strategy and the manner in which resources affected the implementation of the strategy. Part of these resources are financial resources expressed through a budget, which is a key component under study in this research. Hence, the theory helped address the question: What are the key resources to be considered for strategic decision making? (Barwise, Marsh & Wensley 1989:107-125).

## **1.3 PROBLEM STATEMENT**

In the current outcomes-oriented monitoring and evaluation value chain, effective inter-governmental planning and budgeting for better outcomes shows that the interface between planning and budgeting is not strong (Rakabe 2013:24). According to the prevailing criticism, budgeting takes too much time, budgets are too inflexible and the whole process is too bureaucratic and impedes the use of a company's full potential (Amuenje 2009:17). In this regard, Hope and Fraser (2001:67) observe that the strategic planning and budgeting processes account for up to 20 to 30 percent of the time of senior executives and financial managers. A study by PWC (2012:20) highlighted the need for organisations to improve their strategic planning, budgeting and forecasting capabilities. At the same time, Miller and Galeaz (2007:39) believe that since strategic planning and budgeting are the key performance management and measurement processes, they need to be flexible and robust enough to enable the organisation to cope with the ever-increasing environmental and business challenges.

Notwithstanding the environmental changes and challenges faced by the public sector, it has become imperative that government institutions continuously renew their ways of doing business and adjusting their management model in order to improve their performance (RSA 2000:14). Despite the recognised importance of strategic planning, budgeting and performance of public institutions, there remains a lack of research focusing on the alignment of strategic planning and budgeting processes in the South African public sector environment. Therefore, the findings of this study are expected to yield practical implications for strategy and budget managers in the public sector. Besides, it will add new literature to the existing body of knowledge of public sector institutions.

## **1.4 CONCEPTUAL MODEL AND HYPOTHESES**

### **1.4.1 Conceptual model**

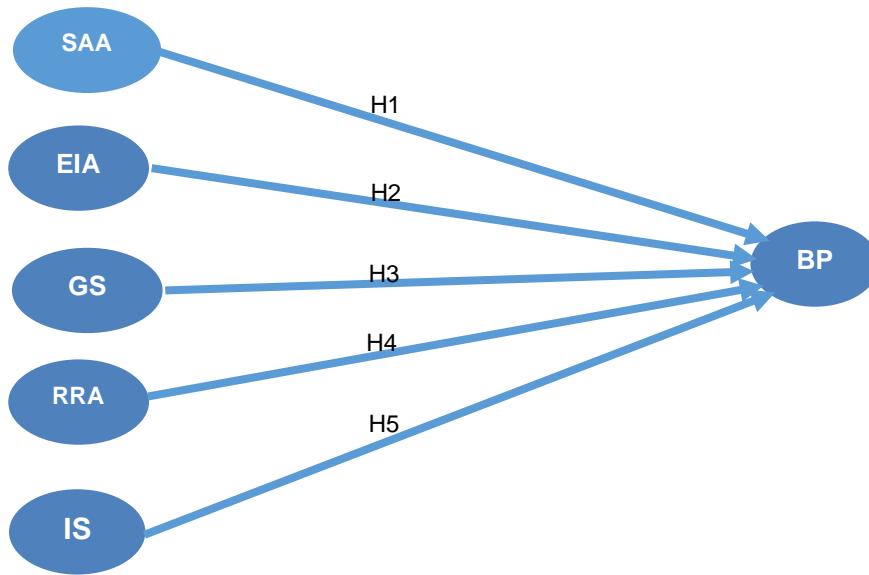
The conceptual model proposed in this study is illustrated in Figure 1.1. By this model, it was proposed that there was an alignment between strategic planning and budgeting processes (BP). In the conceptual model, strategic planning was presumed to constitute of five factors, namely strategic analysis assessment (SAA), environmental impact assessment (EIA), goal setting (GS), responsibilities and resource allocation (RRA) and information system (IS). The meaning of these factors is expounded in Chapter 4. In the model SAA, EIA, GS, RRA and IS are predictor variables whereas BP is an outcome variable.

### **1.4.2 Research hypotheses**

In light of the conceptual model, the following hypotheses were postulated:

- H1: There is a positive relationship between SAA and BP.
- H2: There is a positive relationship between EIA and BP.
- H3: There is a positive relationship between GS and BP.
- H4: There is a positive relationship between EIA and BP.
- H5: There is a positive relationship between IS and BP.





**Figure 1.1: Conceptual model**

## **1.5 OBJECTIVES OF THE STUDY**

### **1.5.1 Primary objective**

The primary objective of the study was to investigate the extent of alignment between strategic planning and the budgeting processes in selected South African national government departments.

### **1.5.2 Theoretical objectives**

In order to achieve the primary objective, the following theoretical objectives for the study were formulated:

- To conduct a literature review on strategic planning
- To conduct a literature review on the budgeting process
- To explore the theory on which this study was based
- To review the literature on strategic planning and budgeting processes in the South African public sector.

### **1.5.3 Empirical objectives**

To achieve the primary objective, the following empirical objectives were formulated:

- To determine the relationship between SAA and BP in the selected government departments
- To examine the relationship between EIA and BP in the selected government departments
- To investigate the relationship between GS and BP in the selected government departments
- To establish the relationship between RRA and BP in the selected government departments
- To determine the relationship between IS and BP in the selected government departments

## **1.6 RESEARCH DESIGN AND METHODOLOGY**

A research design is a plan or a blueprint of how the research is to be conducted, whereas research methodology refers to the systematic methodological and accurate execution of that design (Babbie & Mouton 2010:74). A descriptive survey research design was considered appropriate because of the larger population involved (Leedy & Ormrod 2013:195).

### **1.6.1 Literature review**

A literature review is a written product; the format varies depending on the purpose of the review (Jesson, Lazey & Matheson 2011:9). A variety of sources were consulted during the literature review process. The review focused on strategic planning and the budgeting processes. The literature on the relationship between strategic planning and the budgeting process was explored. In order to establish a theoretical background and solid foundation for the research, the literature was drawn from articles, journals, publications, textbooks and Internet searches.

### **1.6.2 Empirical study**

The three approaches to research are quantitative, qualitative and mixed-method approaches. In this study, the quantitative approach was adopted. With the quantitative approach, data are quantified using statistical methods. Hair, Wolfinbarger, Ortinau and Bush (2008:81) emphasise that quantitative research methods are most often used with descriptive and casual research designs. The research design for the study is a descriptive design, thus confirming that the use of a quantitative approach is the most appropriate for the study.

### **1.6.3 Target population**

The target population is defined by Kumar (2011:398) as “a large group, such as families living in an area, or people belonging to an organisation about whom you wish to collect data for your research”. But, for practical reasons, an entire target population often cannot be studied. In this research, the target population are senior managers from the selected national government departments. These senior managers are all based in Pretoria, South Africa. The target population was 4500. The composition of the target population is explained in greater detail in Chapter 3.

### **1.6.4 Sampling frame**

According to Babbie and Mouton (2010:208), a sample frame is the list of elements from which a sample is selected. This frame is necessary to arrive at an unbiased, accurate conclusion or finding because it defines the population being studied completely. The list of senior managers was drawn from the HR government department’s database after permission was sought and granted.

### **1.6.5 Sampling technique**

Babbie and Mouton (2010:209) consider sampling as a process through which the units of analysis are selected from the total population. The non-probability sampling was deemed appropriate for this study, in which all the elements of the study did not have an equal chance of being selected (Wegner 2012:155). Convenience sampling, which is one of the non-probability sampling methods, was conceived relevant because of the proximity of selected government departments and the ease with which units of analysis were reached. This aspect is explained in detail in Chapter 3.

### **1.6.6 Sample size**

The sample size refers to the elements to be included in a research study (Gupta 2004:196). The sample size for this study was 300 and was deemed to be adequate to provide a good representation of senior managers in the selected national government departments. This sample size was in line with that of similar studies, which used samples of 236 (Poister 2010:255) and 207 (Mazzara, Siboni & Sangiorgi 2011:75).

### **1.6.7 Measurement instruments**

A structured questionnaire was utilised to collect data using a survey method. The structured questionnaire comprised three sections:

- Section A garnered biographical information about respondents in respect of gender, age, qualification, current position and number of years in service.
- Section B comprised questionnaire statements on the strategic planning process. This questionnaire was adopted from Caribbean Centre for Development Administration (2003:31-35).
- Section C elicited responses on the budgeting processes and was adopted from Centre for Business Performance (2001:6-7)

For sections B and C, the measurement items were measured using a five-point Likert scale, where 1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree and 5=strongly agree.

## **1.7 STATISTICAL ANALYSIS**

In order to reach the research objectives, the collected data were subjected to statistical analysis. Descriptive statistics was used for data relating to biographical information of respondents and calculating the means and standard deviations for factors of the strategic planning process and budgeting process. Exploratory factor analysis was undertaken to establish underlying factors in strategic planning and the relationship between the two variable measures by means of correlations and regression analyses. The Statistical Package for the Social Sciences (SPSS), version 25.0, was used for this purpose. Validity and reliability of the research instruments were tested. These aspects are explained in detail in chapters 3 and 4.

## **1.8 RELIABILITY AND VALIDITY ANALYSIS**

The requirements for internal reliability and validity were applied during the research. Maree (2010:215) defines reliability as “the extent to which a measuring instrument is repeatable and consistent”. Internal consistency was tested by using Cronbach’s alpha coefficient. Cronbach’s alpha values range from zero to one and in the Social Sciences, values of 0.7 and above are considered to be a satisfactory threshold (Andrew, McEvoy & Pederson 2011:202).

Validity refers to the degree to which a test or instrument measures what it purports to measure (Thomas, Nelson & Silverman 2010:193). The following types of validity were examined: content, construct, convergent and predictive validities. These types of validity were achieved by ensuring that the instrument actually measures what it was intended to measure. These types of validities are explained in detail in Chapter 3 and the extent to which the research instrument complied with the validity requirements is elaborated on in Chapter 4.

## **1.9 ETHICAL CONSIDERATIONS**

Ethics in research is considered an inquiry into the nature and grounds of morality where the term morality is taken to mean moral judgement, standards and rules of conduct (Berndt & Petzer 2011:286). At its simplest level, ethics is what people agree on about right and wrong and good and bad. It is important to adhere to ethical norms in research to promote the aims of research, such as knowledge, truth and avoidance of error. The following ethical norms and standards were adhered to in the conduct of this research:

- The researcher requested permission to conduct the study from selected national government departments.
- Confidentiality of the information provided by senior managers were maintained.
- The research ensured that the participation of senior managers was voluntary and informed each respondent about the purpose of the study.
- The researcher made sure that the personal data of the respondents was processed fairly and used only for the purpose of the study.
- The questionnaire was anonymous.
- The identity of respondents was not be disclosed in the analysis and interpretation of results.

## **1.10 CHAPTER CLASSIFICATION**

### **Chapter 2: Literature review: Strategic planning and budgeting processes**

This chapter provides a review of the literature on strategic planning and budgeting processes. The previous literature on the relationship between strategic planning process and the budgeting process is explored. The theoretical framework underpinning the study is analysed.

### **Chapter 3: Research design and methodology**

This chapter revolves around the quantitative research approach adopted in the study. The sampling procedure and data collection method are discussed and statistical methods used to analyse data are explained. Reliability and validity types, including ethical considerations, are highlighted

### **Chapter 4: Analysis and interpretation of results**

In this chapter, research results are presented and data are interpreted in line with the empirical objectives outlined in Chapter 1.

### **Chapter 5: Conclusion and recommendations of the study**

The overview of the study is presented. The extent to which the theoretical and empirical objectives were achieved is highlighted. Furthermore, key research findings are cited and related recommendations outlined. This is followed by indicating limitations of the study and identifying future research implications.

## **1.11 CHAPTER SUMMARY**

The first chapter focused on providing the background of the study. The problem statement, the primary, theoretical and empirical objectives were outlined. The conceptual framework was configured with its independent and dependent variables. The sampling procedure was described with the purpose of identifying the target population, proposing the sampling method and determining the sample size. The statistical methods utilised to analyse data were elaborated upon and ethical consideration adhered to were elucidated.

## **CHAPTER 2**

### **STRATEGIC PLANNING AND BUDGETING PROCESSES**

#### **2.1 INTRODUCTION**

The previous chapter provided a background to the study. It provided the theoretical framework of the study and highlighted the problem statement, research hypotheses and research objectives. Furthermore, it briefly highlighted the research design and methodology conducted, including statistical analysis used. In addition, reliability, validity and ethical considerations and classified the chapters were explained.

In this chapter, the literature review focuses on the notion of strategy, strategic hierarchy, strategic planning process, industrial analysis, strategic analysis and choice, and strategic implementation, and strategic control or evaluation. The literature around strategic planning and budgeting process was reviewed, focussing on how these processes are implemented in national government departments. The rational and logical approach was adopted in explaining the key elements of strategic planning. A brief summary of the chapter is provided at the end.

#### **2.2 THEORETICAL FRAMEWORK OF STRATEGIC PLANNING AND BUDGETING**

The current study is grounded on the resources dependency theory (RDT). The study evaluates to what extent the resource dependence theory (RDT) influences strategic planning and budgeting. Werner (2008:10) suggests that the concept of the RDT gained public awareness through the book by Jeffrey Pfeffer and Gerald Salancik, *The External Control of Organizations*. RDT states that organisations need resources to sustain their existence in the long term (Zehir, Findikli & Çeltekliligil 2018:162). A fundamental assumption of RDT is that critical and important resources influence the actions of organisations and that organisational decisions and actions can be explained depending on the particular dependency situation (Werner 2008:11). RDT should be examined in the context of organisational survival and sustainability in order to gain a greater understanding of how resource dependency-based strategies can be beneficial to leadership (Powell & Rey 2015:96).

The central proposition of this theory is that an organisation's survival depends on its ability to acquire critical resources from the external environment (Klein & Pereira 2016:157). The central hypothesis in RDT postulates that whoever controls resources has the power over those actors who need these resources (Nienhueser 2008:28-29). To be able to understand organisational behaviour, one must first clarify which resources are the critical ones. Criticality measures the ability of the organisation to continue functioning in the absence of the resource or in the absence of the market for the output (Pfeffer 2003:46).

RDT advances that by recognising the influence of external factors on organisational behaviour, albeit constrained by their context, managers can act to reduce environmental uncertainty and achieve set objectives of the organisation (Hillman, Withers & Collins 2009:1404). Furthermore, these authors state that given the changes of the economic environment, fewer barriers to entry and market forces, it is imperative that institutions understand this environment and work within it to acquire and strengthen their resource capacity. By providing a resource dependency perspective, institutions such as national government departments can enhance strategic planning efforts and utilise applicable strategies to mitigate challenges, such as financial vulnerability, which are caused by environmental changes (Powell & Rey 2015: 98).

According to Ikavalko (2005:2), implementing strategies successfully is vital for any organisation, either public or private. Implementing strategies is perceived as being about allocating resources and changing organisational structure. The success of an organisation depends on how an organisation's resources are organised and coordinated. Muriuki and Stanley (2015:216) state that strategic planning involves the activities of the organisation defining its strategy or direction and making decisions on allocating resources to pursue this strategy. In the context of selected government departments, senior managers have to identify the key resources necessary, such as leadership, positive culture and human resource capabilities that will enable these departments to reach their strategic objectives (Muriuki & Stanley 2015:218).

Human resource capabilities play a very significant role in strategy implementation (Fozzard 2001:5-13). Quality people, referring to right skills, right attitude, capabilities, experiences and other characteristics of people required to perform specific tasks, are key in strategic plan



implementation. They form a key resource and source of competitive advantage for an organisation (Muriuki & Stanley 2015:218).

Resources could also comprise financial resources expressed in the form of a budget. In this instance, Graham (2011:1) asserts that government is responsible for bringing together large amounts of resources to achieve public goods and these are monitored through mechanisms such as budgeting. In this study, budgeting was examined to determine its extent of alignment with strategic planning. The proposition is, therefore, that strategic planning in selected government departments can be realised only if it is girded on effective budgeting.

### **2.3 THE NOTION OF STRATEGY**

Strategy was originally used in the military and has subsequently been adapted for use in business (Nickols 2016:1). Furthermore, this author contends that strategy is a term that comes from the Greek word *strategia*, meaning generalship. In the military, strategy often refers to manoeuvring into position before the enemy is actually engaged. In this sense, strategy refers to the deployment of troops. Once the enemy has been engaged, attention shifts to tactics. In this case, the employment of troops is central. Poister (2010:245), and Jenkins, Ambrosini and Collier (2016:1-3) concur that strategy is about setting goals in order to confront the complex and uncertain future; it involves the allocation of resources necessary for consistent, integrated and cohesive action for achieving organisational goals.

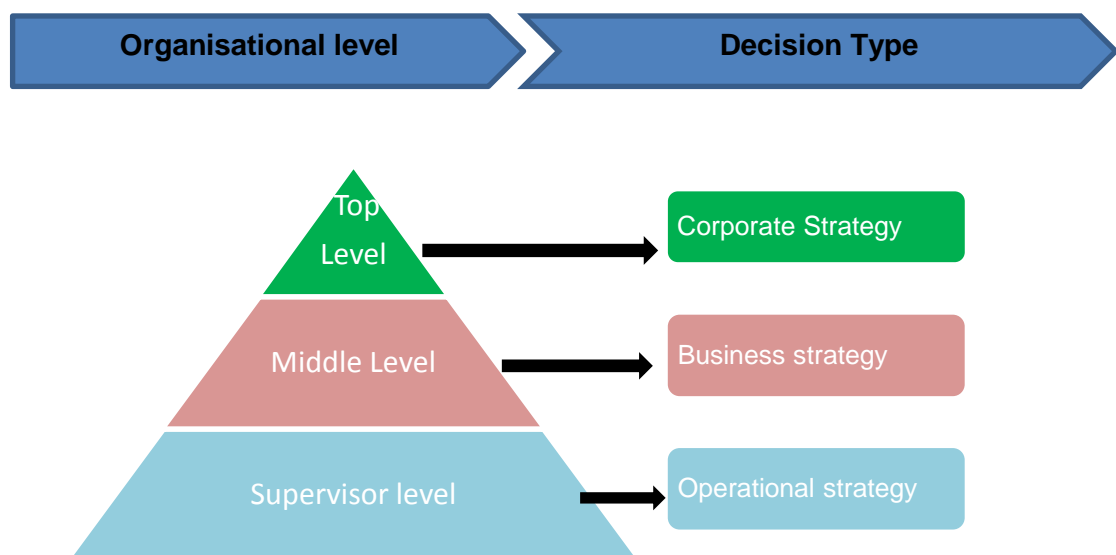
Strategy concerns a combination of both planned, deliberate actions and unplanned, emergent activities (Peng 2014:4-15). Peng states that an unplanned strategy development creates an emergent strategy that is not a rulebook, a blueprint, or asset of programmed instruction. It is an organisation's theory about how to compete successfully and is a unifying theme that gives coherence to its various actions. Emergent strategies are the unplanned responses to unforeseen circumstances. Jofre (2011:7) reports that strategy development always implies changes in the organisation and in its relationship with the environment and with itself.

In general, Talloo (2008:74) points out that the strategy of a business organisation represents the general direction of the efforts of an organisation. It consists of the managerial decisions regarding the future direction and scope of the business enterprise. It entails managerial choice

among alternative action programmes, commitments to specific products, markets, competitive moves and business approaches, for the purpose of achieving the enterprise's objectives.

## 2.4 THE STRATEGY HIERARCHY

Though business policy and strategic decision making are the responsibility of the top-level management, it is considered useful to distinguish between the implications of strategy at the different levels of the organisation. Figure 2 illustrates that in any organisation, strategic decisions occur at three levels, namely corporate, business and operational levels (Talloor 2008:75).



**Figure 2.1: The levels of decision making in an organisation**

Source: Montana & Charnov (2000:93)

### 2.4.1 Corporate level strategy

According to Grant (2016:18), corporate strategy involves the scope of an organisation in terms of the industries and markets in which it competes. Corporate strategy is the highest level of strategy development. It deals with which industries or markets an organisation seeks to participate in and then sets the long-term direction and scope for the organisation (Gallagher 2013:1). Strategic decisions at this level include acquisition and allocation of resources and coordination of strategies of various strategic business units (SBUs) for optimal organisational performance (Sekulić 2002:67).

Corporate strategy is the responsibility of corporate top management of the organisation (Grant 2016:18). Organisations often express their strategy in the form of a corporate mission or vision statement. The distinction between corporate strategy and business strategy corresponds to the organisational structure of most companies (Hill, Jones & Schilling 2015:14). The nature of decisions at strategic level tend to be value-oriented, conceptual and less concrete than decisions at the business or operational level. Decision making at this level requires both management thinking and analysis to compare current state to desired state in order to identify the gap and use the organisational capabilities to effect the required changes. However, top management and other stakeholders play a critical role in developing corporate strategies that provide strategic direction to the organisation (Kazmi 2006: 32).

#### **2.4.2 Business level strategy**

Salimian, Khalili, Nazemi and Alborzi (2012:12-17) explain that business-level strategy is also referred to as competitive strategy. Business-level strategy deals with the method of competition and determines the place of a business within a specific industry (Grant 2016:18). Lavarda, Canet-Giner and Peris-Bonet (2010:358-362) assert that the role of middle management is essential when managing integrative and emergent strategy formation processes at a business level. Middle managers play a critical role in the implementation of organisational strategies and focus mainly on two aspects: “position” in the hierarchy and “function” rendered by them (Banumathi & Samudhararajakumar 2015:21). Once a business strategy has been developed, an operational strategy must be formulated in such a way that it will support business strategy.

#### **2.4.3 Operational level strategy**

Operational level strategy involves the structuring of work processes and assigning appropriate resources to an operating system to achieve the organisation’s strategy (Van Mieghem 2011:1). To support the corporate strategy, the operational level strategy decisions about structure, infrastructure and capabilities to support competitive priorities should be made (Kim, Sting & Loch 2014:482).

## **2.5 STRATEGIC PLANNING PROCESS**

Poister (2010:249) defines strategic planning as “a systematic process for managing the organisation and its future direction in relation to its environment and the demands of external stakeholders, including strategy formulation, analysis of agency strengths and weaknesses, identification of agency stakeholders, implementation of strategic actions, and issue management”. Strategic planning is the process of defining an organisation’s plans for achieving its mission (Gates 2010:3). Furthermore, Gates explains that this process examines an organisation’s current environment and abilities and considers how it would like to grow or evolve; therefore, it spells out its aspirations or future plans. Strategic planning involves how the organisation will change to take advantage of new opportunities that help meet the needs of customers and clients.

Maxegwana (2012:29) amplifies that the practice of strategic planning is based on the idea that leaders in organisations should be effective as strategists if they are to promote their organisation’s growth and sustainability. Poister (2010:245) emphasises that effective managers make use of a strategy to focus their efforts, to guide their decision making and actions and to give their organisation a sense of purpose. Both authors agree that strategic planning is intended to help managers focus on the future by considering the internal and external environment that can impact on their plans.

Rezvani, Gilaninia and Mousavian (2011:1544) state that an organisation without a strategic plan in unpredictable and uncertain environments will lose the way and cannot fulfil its mission. Although, strategic planning has a series of limitations and restrictions, using it properly by thoughtful managers can cause impressive and positive results. Within the public service, the use of strategic planning is regarded as a means to strengthen performance of departments and has been proven as the most important and fundamental step in realigning departments to be performance-oriented (Mansor & Tayib 2012:20).

Olsen and Olsen (2009:22) cite several different components of a strategic plan, which include vision, strategic intent, mission, environmental analysis, industry analysis, strategic analysis and choice, strategic management and control.

### **2.5.1 Vision statement and strategic intent**

Bora, Borah and Chungyalpa (2017:3) state that the vision statement essentially specifies 'where an organisation is headed.' It provides long-term direction to the company. A vision statement is a very important strategic tool and normally considers the company's position and its situation five years or more from today. The vision provides a strategic direction, which is the springboard for the mission and related goals (Darbi 2012:96).

O'Shannassy (2015:2), as well as Odita and Bello (2015:60) concur that strategic intent involves the statement of direction and intention by which an organisation largely expresses its intention or vision of an organisation's aspired direction of growth and plays a pivotal role in shaping organisational resource allocation and capability development. Mburu and Thuo (2015:58-59) argue that the strategic intent focuses on the future opportunities and long-term objectives as opposed to for short-term strategic planning. Strategic intent is about defeating competition and winning the market (O'Shannassy 2015:2). By implication, the strategic intent symbolises and expresses the process of achieving competitive advantage (Odita & Bello 2015:60).

### **2.5.2 Mission statement**

Ritson (2011:18) states that every organisation has a purpose for its continued existence. One of the components of the strategic management process is the crafting of the organisation's mission statement, which provides the framework or context within which strategies are formulated (Taiwo, Lawal & Agwu 2016:127). The mission should be defined before the development of the strategy (Papulova 2014:13). The mission relates to the present and future directions.

A mission statement is not only a strategic tool that serves as the vision's "implementing arm" but also a vehicle through which employees can form an emotional bond with the organisation (Sheaffer, Landau & Drori 2008:50). It helps workers in the organisation to know, which decisions and duties correlate with the mission of the company. The mission is a two or three sentence statement that succinctly states the reason for the organisation's existence – who it is, what it does and who it serves (Millard 2010:1). Mission statements are deemed relevant to the extent that they deliver high levels of motivation and inspiration to employees.

### **2.5.3 Strategic objectives**

Strategic objective is a performance measure that would lead to achieving strategic goals when targets are specific, concrete, measurable and time-framed (Cuthbertson 2012:1). Ritson (2011:18) argues that strategic objectives do not only represent the end point of planning but also represent the end towards which management activities and resources usage is directed. Therefore, the objectives provide a sense of direction and a measure of success achievement.

### **2.5.4 Environmental analysis**

Environmental analysis is a critical part of the strategic management planning process. All organisations need to identify the internal and external factors within their environment that could have an impact on their operations. Babatunde and Adebisi (2012:26) state that environmental analysis is a process of gathering, analysing and dispensing information for tactical or strategic purposes. The environmental analysis process entails obtaining both factual and subjective information on the business environments in which a company is operating or considering entering. It lays the foundation for how the management system that should run in the future and the environmental improvements it should address (Gupta 2013:38). According to Al-Hawary and Al-Hamwan (2017:279), information from an environmental analysis is separated into internal issues (strengths and weaknesses) and external issues (opportunities and threats).

#### **2.5.4.1 Internal environmental analysis**

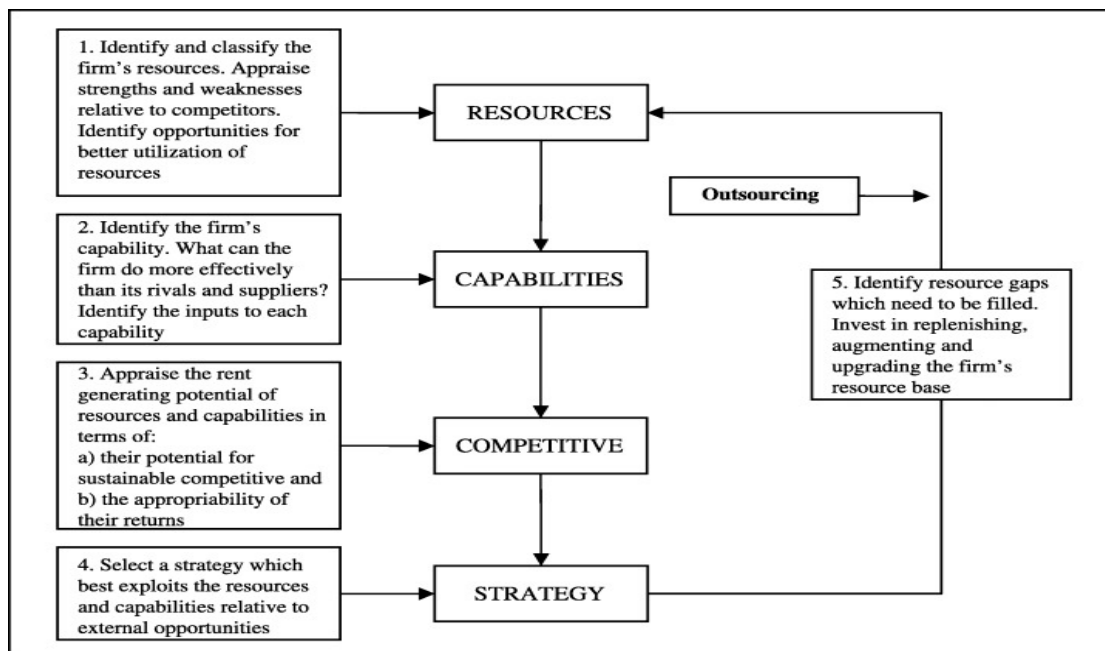
Kraja and Osmani (2015:120) indicate that internal factors have a crucial impact to business environments. Managers of companies must identify internal strategic factors, namely the strengths and weaknesses that will determine whether the company is able to take advantage of existing opportunities while avoiding threats. There are many opinions on how a company analyses the internal environment (Indris & Primiana 2015:190). Owners/ managers of companies should look into the company to identify internal factors, namely the strengths and weaknesses that will determine whether the company is able to take advantage of existing opportunities while avoiding threats (Barney & Hesterly 2008:74). The analysis of the company's internal environment includes the resources, capabilities and competencies held by the company, also known as the RBV. RBV emphasises the organisation's resources as the

fundamental determinants of competitive advantage and performance (Barney & Hesterly 2008:74).

Figure 2.2 represents the role that the resources of the organisation hold as a starting point in the drawing up of the organisation's strategy. It can be noted that organisation's resources and capabilities constitute the basis for developing competitive advantage (Al-Hawary & Al-Hamwan 2017:279). The next paragraph explains these key components of the organisational resources analysis.

### 2.5.4.1.1 Resources

Barney and Hesterly (2008:75) consider resources in the RVB as the tangible (visible assets) and intangible assets (invisible assets) that an organisation controls and that it can use to conceive of and implement its strategies. Sammut-Bonnici and Galea (2015:7) state that resources are the inputs required to produce a product or service. Resources can be combined and developed into capabilities, which in turn create core competences. Examples of resources for tangible assets include an organisation's products such as raw materials and computers. Invisible assets (intangible assets) are included in the brand, reputation, moral enterprise, technical knowledge, patents, trademarks and accumulated experience of a company.



**Figure 2.2: Organisational resource analysis instrument**

Source: Pearce & Robinson (2013:164)

#### **2.5.4.1.2 Capabilities**

Capability of the organisation refers to the skills and ability of combining assets, people and processes that can be used by companies to transform inputs into outputs (Indris & Primiana 2015:190). Capabilities are an organisation's capacity to make efficient use of its internal resources and the ability to combine them into competitive products and processes (Sammut-Bonnici & Galea 2015:7). Capabilities are developed from a complex set of internal resources and become embedded in a tacit manner into an organisation's internal processes. Intangible resources tend to be the main source of inimitable strategic capabilities (Sammut-Bonnici & Galea 2015:7).

#### **2.5.4.1.3 Competitive strategy**

Grant (2016:80) describes competitive strategies as taking offensive or defensive actions to create a defensible position in an industry, to cope successfully with the five competitive forces and thereby yield a superior return on investment for an organisation. Kay (2014:3) further amplifies that competitive strategy is about trying to achieve some kind of advantage over competitors. An organisation should seek to try to achieve some position that is difficult or impossible for rivals to imitate.

#### **2.5.4.1.4 Strategy**

The strategy followed by each organisation will depend on the resources they possess (Milara 2014:6). The strategy of the organisations should be supported by intangible resources. Furthermore, Milara (2014:6) reports that RDT prescribes that the main focus should be on resources and internal capacities of each company to achieve its competitive advantage that will lead to a sustained revenue stream in the long term.

#### **2.5.4.2 External environmental analysis**

Voiculet, Belu, Parpandel and Rizea (2010:2) indicate that the external environment of an organisation includes a variety of factors that influence its conducting of daily business operations and performance. These factors may be direct or indirect and are external to the organisation. In the process of formulating policy options, the organisation must take into



account external environmental opportunities and threats, in the present and the future (Blankson 2005:3).

Companies should look into the opportunities, which are external factors and are favourable to achieve the organisation's objectives; threats that are unfavourable to achieve the organisation's objectives are external risk beyond the control an organisation (Team FME 2013:11 - 17). Organisations need to plan or decide on how to mitigate this risk. Opportunities can occur for a variety of reasons and may occur as a result of changes in the market, customer lifestyle changes, advances in technology and new production methods (Pîndiche & Lonita 2013:23).

Naturally, organisations do not exist in isolation and their performance can vary because of their external environment (Indris & Primiana 2015:189-190). Pîndiche and Lonita (2013:23) and Yam (2016:1-2) state that the external environment of an organisation consists of political, economic socio-cultural, and technological factors that have an influence in the strategic option an organisation finally decides upon.

#### **2.5.4.2.1 The macro-environmental factors**

Tariq (2020:1) defines macro environment as “the general environment within the economy that influences the working, performance, decision making and strategy of all business groups at the same time”. It is dynamic in nature, therefore, it keeps on changing. Macro environment consists of the broad trends and patterns in the nation and world beyond the organisation (Gallagher 2013:1). These patterns and trends highly influence customer needs and an organisation's options. Macro environment consists of factors that are difficult to control because it is beyond the reach of the company's management and are often abbreviated with PEST: politics, economy, social-cultural and technology (Gallagher 2013:1)

The PEST analysis is a useful tool for understanding market growth or decline and the position, potential and direction the business is taking. A PEST analysis is a business measurement tool for an organisation that needs to become successful. The underlying thinking of the PEST analysis is that the enterprise has to react to changes in its external environment. This reflects the idea that strategy requires a fit between capabilities and the external environment and so it is necessary for an enterprise to anticipate and be proactive to changes (Gupta 2004:13).

According to Gupta (2004:14), political changes might be expected in any environment, which relate to government regulations and legal issues and this has an impact on both formal and informal rules under which an organisation must operate. Economic changes affect the cost of capital and purchasing power of an organisation (Downey 2007:6) and include economic growth, interest rates, inflation and currency exchange rates. Social changes include the demographic and cultural aspects of the external macro environment. Organisations should be aware of demographic changes as the structure of the population by age, affluence, region, numbers working can have an important bearing on the demand of particular products and services (Koumparoulis 2013:33).

Technological change covers the effects of technological change on products, processes and distribution channels (Kolios & Read 2013:5029-5030). Technological breakthroughs can create new industries, which might prove a threat to existing organisations whose products or services might be rendered redundant and those organisations which might be affected in this way should be alert to the possibility (Voiculet, Belu, Parpandel & Rizea 2010:2). Equally, new technology could provide useful input in both manufacturing and service industries but, in turn, its purchase will require funding and, possibly, employee training before it can be used (Indris & Primiana 2015:189).

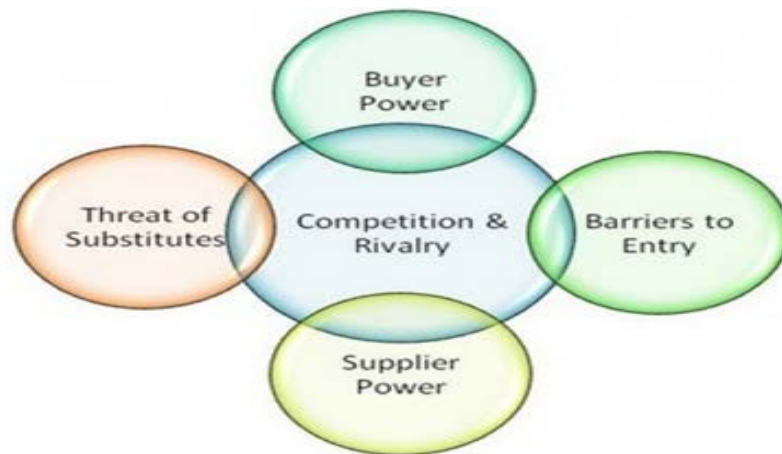
Micro environment and macro environment both cover the overall environment of business. They are more complementary than contradictory. The analysis of these environments helps to know the strength, weaknesses, opportunities and threats of business.

## **2.6 INDUSTRY ANALYSIS**

Cuellar-Healey and Gomez (2013:5) define industry as “the group of firms producing products that are close substitutes for each other”. Industry analysis helps businesses understand various economic pieces of the marketplace and how these various pieces may be used to gain a competitive advantage. Industry analysis can take two broad forms, namely Michael Porter’s five forces (2008:1) and Brandenburger and Nalebuff’s value net (1996:16).

### 2.6.1 Porter's Five Forces Model

Porter's Five Forces Model, identifies and analyses five competitive forces that shape every industry and help determine an industry's weaknesses and strengths and also provides a convenient framework for exploring the economic factors that affect the profits and prices of an industry (Grant 2016:80). Figure 2.3 represents Porter's Five Forces Model.



**Figure 2.3: Five forces analysis**

Source: Porter (2008:1)

Porter's five forces are the bargaining power of the buyer, entry barriers, rivalry among the already established organisations, threat of substitutes and the bargaining power of the supplier (Grundy 2006:214; Indiatsy, Mwangi, Mandere, Bichanga & George 2014:77). All these forces attempt to capture the ability of others to expropriate some or all an organisation's profits (Lionis 2014:29).

#### 2.6.1.1 Competition and rivalry

Competition and rivalry refer to the price that customers are willing to pay for a product and are impacted by the availability and price of substitute products (Porter 2008:32). Competition has proved to be a critical force in the operation of various organisations, regardless of the industry they belong to and usually occurs among the major players in the industry (Grundy 2006:214; Indiatsy *et al.*, 2014:74). Slater and Olson (2002:2) add that competition and rivalry among major players in the industry has the greatest influence on returns on investment, growth and profit potential for organisations in the industry.

### **2.6.1.2 Buyer power**

Chen (2008:2) considers buyer power to be the market power exercised by buyers. By implication, buyers may threaten an industry by forcing down prices, bargaining for higher quality or more services and playing competitors against each other, resulting in reduced profitability (Indiatsy *et al.*, 2014:77). In the retail industry, power of retailers is linked to their selling power, where one power reinforces the other. The selling power, which translates into increased profit and financial strength, provides retailers with the ability to extract discounts and obtain low prices from suppliers and may be able to place contractual obligations that would benefit themselves (Dobson, Clarke, Davies & Waterson 2000:5).

### **2.6.1.3 Supplier power**

Slater and Olson (2002:4) indicate that most buyers seek a bargaining advantage relative to suppliers. The forces that lead to more supplier power are the same as those that lead to more customer power. Suppliers have the greatest bargaining power when they are large, few in number and can sell easily to alternate customers. Suppliers can pressurise an industry through price increments or quality reduction of the purchased products (Indiatsy *et al.*, 2014:78).

### **2.6.1.4 Threat of substitutes**

Manuel (2007:7) states that substitute products are those products that appear to be different but can satisfy the same need as the original product. The author further asserts that substitutes limit the potential returns of an industry by placing a ceiling on the prices organisations in the industry can profitably charge. Lima (2006:2) explains that relative price performance of substitutes is the price of substitutes for the output compared to the price charged. The price that consumers are willing to pay for a product depends on the availability of substitute products (Kaiser 2009:11). If the price of substitutes is lower, the competitive threat increases as the price differential increases. The author further propounds that the greater the switching costs, the lower the threat of substitutes because buyers have a stronger incentive to stick with a single supplier.

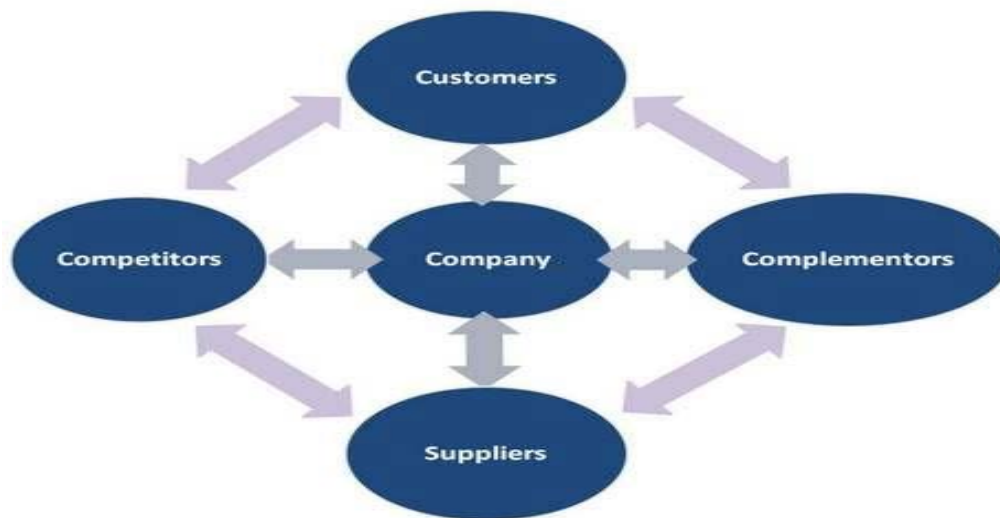
### **2.6.1.5 Barriers to entry**

Bain (1956:3) defines barriers to entry as “an advantage of established sellers in an industry over potential entrant sellers, which is reflected in the extent to which established sellers can persistently raise their prices above competitive levels without attracting new organisations to enter the industry”. Raising prices increases the cost of production for organisations that seek to enter an industry (Stigler 1968:67). Conversely, new organisations would be able to enter an industry if competitive levels would settle down (McAfee, Mialon & Williams 2003:4). If organisations in an industry are highly profitable, the industry becomes a magnet to new entrants (Kaiser 2009:12). Unless something is done to stop this, the competition in the industry will increase and average industry profitability will decline. Organisations in an industry try to keep the number of new entrants low by erecting barriers to entry (Grundy 2006:217).

### **2.6.2 Value net**

A value net is a business design that uses digital supply chain concepts to achieve both superior customer satisfaction and company profitability (Brown 2009:8). Value net is a way of looking at a business situation that recognises that the company (or industry) operates in an environment having four main groups that influence the course of any business and these four forces are customers, complementors, competitors and suppliers (Lendel 2007:242). Figure 2.4 illustrates the value net and its forces. Value net is a schematic map designed to represent all the players in the game and the interdependencies among them. As illustrated in Figure 2.4, interactions take place along two dimensions, vertical dimensions are the company customers and suppliers while horizontal dimensions are its competitors and complements. Value net is no longer just about supply; it is about creating value for customers, the company and its suppliers (Brown 2009:8).

Porter (2004:5) differentiates industries on the basis of competition, while Brandenburger and Nalebuff's (1996:16) emphasise that there are not only competitive, but also cooperative relationships among the forces in the market, which are of equal importance to achieving success in business. This combination of competition and cooperation creates, in contrast to Porters model, a slightly different model of market analysis. The forces in value net add value together that creating competition in the industry.



**Figure 2.4: Value Net**

Source: Brandenburger & Nalebuff (1998:2)

## 2.7 STRATEGIC ANALYSIS AND CHOICE

Djordjević (2014:42) states that strategy analysis and choice seek to determine alternative courses of action that could best enable an organisation to achieve its mission and objectives. They involve subjective decision making based on the objective information. An organisation's present strategies, objectives and mission, coupled with the external and internal factors provide a basis for generating and evaluating feasible alternative strategies. Strategic choice is a part of the strategic process and involves the identification and evaluation of alternatives, which then leads to making a set of choices (Haitham 2016:16). These choices are represented by the decisions managers pursue during a strategic process, which may occur during formulation or the implementation stage of strategy. There is plenty of research to demonstrate that no matter how good your mission, goals and objectives are, it is your choice of strategy that really determines success or failure (Rogers 2003:2). Rudnicki and Vagner (2014:176) advises that identifying and evaluating alternative strategies should involve managers and employees who were involved in the formulation of the vision and mission statements, and analysis of the external and internal environmental.

## **2.8 STRATEGY IMPLEMENTATION AND CONTROL**

### **2.8.1 Strategy implementation**

Strategy implementation has been variously defined as “the communication, interpretation, adoption and enactment of strategic plans” (Hourani 2017:13), while Wheelen and Hunger (2006:214) define strategy implementation as “the sum total of the activities and choices required for the execution of a strategic plan”. Muchira (2013:5) emphasises that strategy implementation involves the organisation of an organisation’s resources and motivation of the staff to achieve the organisation’s objectives. Brinkschröder (2014:3) suggests that employees and their behaviour play an important role in strategic implementation, as they are the ones who have to act according to the organisational strategy. Brinkschröder (2014:3) further submits that employees act in specific organisational structures that affect their behaviour and behaviour of those they manage which has an impact on the achievement of organisational objectives.

Chen, Guo and Li (2008:122) assert that strategic implementation is a complex process, which links both internal and external systems together.

### **2.8.2 Strategy control**

Wanjohi (2013:12) views strategic control as the process of evaluation if strategy was properly formulated and implemented and seeks to identify whether the existing strategy fits the current and future needs and whether there is need to change it. Lazenby (2014:103) adds that strategic control provides feedback regarding the formulation and implementation phases of the strategic management process. This feedback indicates the adjustments an organisation will need to make in order to align itself better with its environment and improve the likelihood of successful strategy implementation.

Wanjohi (2013:12) affirms that strategic control is a critical phase in strategic management that highlights the efficiency and effectiveness of the selected strategies and plans in relation to desired outcomes. This process consists of four fundamental activities, namely fixing a performance benchmark, measurement of performance, analysing variances and taking corrective actions. Strategic control managers exercise strategic control when they work with

the part of the organisation they have an influence over to ensure that it achieves the strategic aims that have been set for it (2GC Limited 2009:1).

There are four types of strategic control that organisations can use, namely premise control, strategic surveillance, special alert control and implementation control (Lazenby 2014:104). The first three are used to review the content of the strategy and the latter is used to evaluate strategy implementation. The three main stages of strategic management, which are formulation, implementation (action stage) and evaluation of strategies, are very important. The strategic management process is an interrelated process. A strategy formulation decision will impact on a strategy implementation decision, which will, in turn, impact on a strategic control decision. The strategic control decisions will impact on strategy formulation and implementation decisions (Baroto, Arvand, & Ahmad 2014:50). Organisations need to consider not only the development of strategy, but address issues that turn strategy into reality. Both correct formulation and effective implementation and control are crucial to successful business.

## **2.9 STRATEGIC PLANNING IN THE PUBLIC SECTOR**

Institutional units can be classified as being public or private units based on whether they are owned or controlled by public or private units. In the document *Task force on harmonisation of public sector accounting* (2006:4) public sector is defined as “the national, regional and local governments”. In general terms, the public sector consists of governments and all publicly controlled or publicly funded agencies, enterprises and other entities that deliver public programs, goods, or services (Dube 2011:3). Government units are unique legal entities established by political processes that have legislative, judicial or executive authority over other institutional units within a given area (RSA 2008:62).

Strategic planning strengthens the relationship between state and society. This relationship extends beyond the imperatives of electoral cycles and mandates of governments of the day (RSA 2009:10). Since public sector is subject to a number of influences outside its control, this process needs to be repeated periodically to evaluate the effectiveness of strategies. The process of producing and revising plans has to take into account electoral, budgetary and annual reporting and planning deadlines to facilitate timely, integrated oversight (RSA 2000:16).



### **2.9.1 Medium Term Strategic Framework**

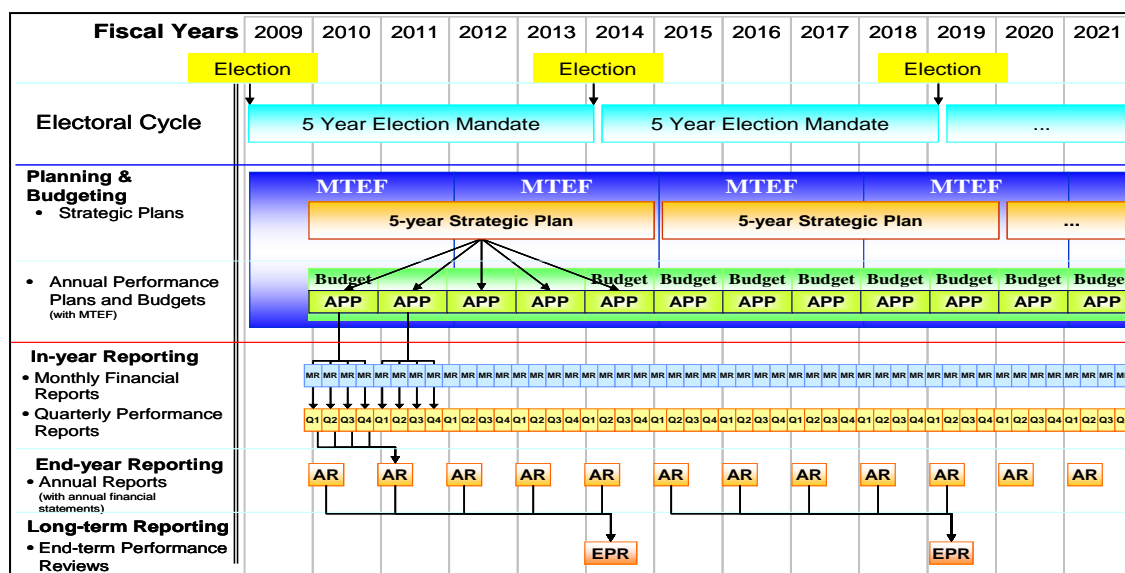
Strategic planning in government is currently guided by the Medium Term Strategic Framework (MTSF), which reflects political priorities, programmes and project plans for a five-year period, ideally from the first planning cycle following an election (RSA 2000:5). The aim of the MTSF is to ensure policy coherence, alignment and coordination across government plans as well as alignment with budgeting processes. The strategic plan focuses on the outcomes-oriented goals for the institution as a whole and ensure that service-delivery areas are aligned to its budget programmes. Strategic management may be viewed as the appropriate and reasonable integration of strategic analysis, strategic formulation and implementation across an organisation (or other entity) in an ongoing way to enhance the fulfilment of a mission, meeting of mandates, continuous learning and sustained creation of public value (Navaz-Lopez & Guerras-Martín 2018:14).

MTSF is government's strategic plan for the electoral term and reflects the commitments made in the election manifesto of the governing party, including the commitment to implement the National Development Plan (NDP) (RSA 2014-2019:4). It also provides a framework for the other plans at national, provincial and local government (RSA 2014-2019:5).

The MTSF also contains high-level development indicators for each outcome. These are designed to enable cabinet, parliament, provincial legislature and the public to monitor the overall impact on society. Progress updates will be made public by the Presidency at least three times per year (RSA 2014-2019:15). The president will enter into a performance agreement with each minister. The performance agreement will contain key indicators and targets. Regular assessments of progress, including performance assessments of ministers, will be used to identify and tackle obstacles to implementation (RSA 2014-2019:15). National and provincial departments submit strategic plans for the period of five years and Medium Term Expenditure Framework (MTEF) for a period of three years to parliament and provincial legislature (RSA 2001:15). These will incorporate the relevant actions and targets in the MTSF, which will subsequently be incorporated into future annual performance plans to provide the vehicle for identifying and responding to any challenges that will arise during implementation (RSA 2014-2019:15).

### 2.9.2 Relationship between legislation, plans, budgets and reporting

Figure 2.5 illustrates the relationship between plans, budget and reporting.



**Figure 2.5: The relationship and timing of the different accountability documents**

Source: RSA (2010:6)

A strategic plan sets out an institution's policy priorities, programmes and project plans for a five-year period approved by its executive authority, within the scope of available resources ideally from the first planning cycle following an election, linked to the identified outcomes of the Presidency (RSA 2000:6). Strategic planning provides a vision for the future, informing each component of annual planning, including budget, income and program planning (Wilson 2014:1).

The Annual Performance Plan sets out what the institutions intend doing in the upcoming financial year and during the MTEF to implement its strategic plan (RSA 2000:7). The document sets out performance indicators and targets for budget programmes and sub-programmes where relevant, to facilitate the institutions' attempts at realising their goals and objectives set out in the strategic plan and the plan should include a quarterly breakdown of performance targets for the upcoming financial year (RSA 2000:7). Wilson (2014:1) add that annual planning establishes specific and measurable outcomes and identifies specific tasks that will be used to accomplish strategies.

When an Annual Performance Plan is prepared, the annual budget should also be prepared as it sets out what funds an institution is allocated to deliver services as the Annual Performance plan shows funded service-delivery targets or projections. The budget covers the current financial year and the following two years, which is also called Medium Term Expenditure Framework (MTEF) (RSA 2000:8).

In the year of implementation and monitoring, the budget is reviewed on the monthly basis and reports are prepared and presented, which culminate in the annual report and annual financial statements (RSA 2008:3). The purpose of the budget review and monitoring of Annual Performance Plan is to check the progress towards the achievement of an objective and compare actual performance with what was planned or expected (RSA 2008:3).

## **2.10 THE CONCEPT OF BUDGETING**

Ross (2008:3) defines budget as “a quantitative expression of a plan for a defined period of time”. It may include planned sales volumes and revenues, resource quantities, costs and expenses, assets, liabilities and cash flows. Iparraguirre (2010:4) views a budget as the annual process in which the government assesses the state of the economy and plans how it will raise revenue in the coming year. The main purpose of budgeting relates to planning, control and supporting the achievement of strategic plans by translating the long-term plan into an annual work programme, coordinating the various departments of the organisation to ensure they are working in harmony and communicating plans to those who will be held accountable (Ross 2008:5). Abogun and Fagbemi (2012:177) add that budgeting is a numerical plan of money inflows and outflows that determines how an organisation will meet its goals and objectives. Shapiro (2001:4) suggests that a budget is a document that translates plans into money, money that will need to be spent to get organisation’s planned activities accomplished (expenditure) and money that will need to be generated to cover the costs of getting the work done (income). Budgeting is used to identify public priorities and is defined by distributing resources to carry out organisational activities (Tanaka 2007:148). Budgeting is viewed also as planning distributed to individual areas of responsibility in a business (IBM 2009:3).

Budgeting is an annual process that often starts with the prior year’s actual performance data and includes the creation of detailed budgets, which together generate a master budget that shows expected future performance across the entire organisation (Maniscalco 2018:2). A

budget must enable resource allocation that is aligned to strategic goals and performance targets set across the entire organisation (KPMG & ACCA 2015:6).

In the context of government operations, a budget is a central policy document of government, which clearly explains how it will prioritise and achieve its annual and multi-annual objectives (OECD 2014:1). Apart from financing new and existing programmes, the budget is the primary instrument for implementing fiscal policy (OECD 2014:1). Budgets, also referred to as financial plans, work plans or programmes, or political and social documents, are guided by several principles, including transparency, accountability, participation, equity, non-discrimination, equality and aligned with the medium-term strategic priorities of government (Parliament of the Republic of South Africa 2011:12). Vitsha's (2003:8) view is that government budgeting can be traced to a concern for holding public officials accountable of their actions. Public budgeting provides different types and quantities of information and resources such as program information and resources.

In South Africa, where this study was located, the Cabinet sets broad policy priorities, which set parameters for budgetary processes such as budget planning, monitoring and evaluation.

## **2.11 BUDGETING PROCESS IN THE PUBLIC SECTOR**

Isaksen (2005:3) defines a budget process as “the process through which government expenditures are determined or allocated”. A budgeting process aims to ensure that resources are allocated to meet South Africa's political priorities and to improve the quality and effectiveness of spending within sustainable fiscal limits (RSA 2000:15). Through the budget process, a large number of public institutions plan, collaborate, negotiate and decide together on a comprehensive plan for spending public resources over the next three fiscal years. Over time, parliament has become more assertive, through playing a more active role in its legislative and oversight mandates (Bisase 2017:2). The key elements of legislative oversight are the evaluation of the efficiency of public service programmes, appropriateness of financial resource allocations, management and the relationships between these key elements (South Africa Legislative Sector 2012:7).

The budget provides a comprehensive statement of priorities and choices of a nation (Bisase 2017:2). Vigorous exercise of parliament's legislation and oversight processes is in the budget

cycle that requires high quality research and analysis, focused on both long- and short term budget outcomes (Bisase 2017:2).

According to Prophix (2016:5), budgeting processes are used to help the flow between planning phases and identifying the most efficient procedures, laying the groundwork for a successful and efficient budget cycle. Furthermore, this author contends that an efficient budgeting process provides more time for analysis and improves the ability to react quickly to change.

## **2.12 BUDGET CYCLE**

Lee, Johnson and Joyce (2008:53) state that to provide responsible government, budgeting is geared to a cycle that allows the system to absorb and respond to new information and allow government to be held accountable for its actions. The budget cycle comprises the major events involved in making decisions about the budget and implementing and assessing those decisions (Parliament of the Republic of South Africa 2011:19). The specific characteristics of the budget cycle differ from country to country. Generally, the budget cycle is likely to have four phases, namely preparation and submission (drafting), approval (legislative), implementation (execution) and audit and evaluation (Lee, Johnson & Joyce 2008:53 & 2013:117; Parliament of the Republic of South Africa 2011:19-26 & 2017:2).

National government must decide how much of the share of nationally raised revenue is allocated to national, provincial and local government. National, provincial and local governments must each decide how to divide their budgets between different departments. Within departments, decisions are made on how much is spent on different programmes. These events go through the various phases of the budget process, namely planning phase, legislative phase, implementation phase and evaluation phase (Parliament of the Republic of South Africa 2011:19).

### **2.12.1 Planning phase**

Litman (2020:1) states that planning refers to the process of deciding what to do and how to do it. Ross (2008:3) defines planning as “the establishment of objectives, and the formulation, evaluation and selection of the policies, strategies, tactics and action required to be achieved”. Planning comprises long-term strategic planning and short-term operational planning. According to Jackson, Sawyers and Jenkins (2009:326), planning is the cornerstone of good

management and requires the development of objectives and goals for the organisation as well as the actual preparation of budgets.

The budget plan is compiled by the executive branch of government via National Treasury, with the cabinet being responsible for crafting policy priorities that inform the macroeconomic and fiscal framework as well as division of revenue across the three spheres of government (Parliament of the Republic of South Africa 2011:19). The key steps of this phase include policy prioritisation, preparation of MTEF budget submission, review of Macroeconomic and Fiscal Framework and Division of Revenue (DORA), recommendations of the medium-term allocation process, deciding on the medium-term allocation process and preparation of the budget (Parliament of the Republic of South Africa 2011:19-23).

There are key documents in the planning phase that are important to consider, namely strategic plan, medium term budget policy statement (MTBPS) and state of the nation's address. The strategic plan sets out an institution's policy priorities, programmes and project plans for a five-year period, as approved by its executive authority, within the scope of available resources (RSA 2000:6). The strategic plan focuses on strategic oriented goals for the institution as a whole and objectives for each of its main service-delivery areas aligned to its budget programmes and where relevant, its budget sub-programmes (RSA 2000:6). All governments have specific long-term goals to reach and since resources are always limited, they have to find the most efficient way to attain these. At the same time, different governments have their own features, which means that strategic planning can never be applied in a blue-print manner but has to be adapted to the specific nation under consideration (UNESCO 2010:8).

The MTBPS outlines the overall aims and objectives for the next three years, projected revenue and expenditure for the next three years and the division of revenue among the three spheres of government (Parliament of the Republic of South Africa 2011:23). This document is tabled in parliament by the Minister of Finance and contains the macro-economic assumptions underpinning the government's fiscal policy (Parliament of the Republic of South Africa 2011:23).

Van Papendorp and Packirisamy (2017:1) define the State of the Nation Address (SONA) as "an annual event in which the president of the country reports on the annual report on the state of the country's affairs". SONA is delivered to a joint sitting of the two houses of parliament

(RSA 2017:1). During this event, the president also outlines government's priorities and goals for the upcoming year (Parliament of the Republic of South Africa 2011:23).

Once the president has addressed parliament, the Minister of Finance tables the annual budget for a financial year in the National Assembly before the start of that financial year and the MEC for finance in a province tables the provincial annual budget in the provincial legislature not later than two weeks after the tabling of the national annual budget, but the minister may approve an extension of time for the tabling of a provincial budget (RSA 2001:30). The next process to follow is the debate in parliament with the involvement of organised interest groups and civil society, the media and the general public (Parliament of the Republic of South Africa 2011:24).

### **2.12.2 Legislative phase**

The role of parliament in approving the budget differs sharply across different countries. In countries with parliamentary systems of government, the national budget is a critically important instrument in ensuring transparency, accountability and good governance (Yapa 2003:21). Public and legislative involvement can help to improve public understanding of the budget and contribute to increased involvement of the public and the legislature in the budget debate (Gomez, Friedman & Shapiro 2006:13). Sofianu (2010:14) emphasises that when discussing and analysing the budget, the legislature or more precisely, its members, have various preferences concerning the financial allocation of the budget resources. The concern relates to what government institutions aim to achieve over the medium term and why, how they plan to spend their budget allocations in support of this and what outputs and outcomes the spending is intended to produce.

The Estimates of National Expenditure (ENE) describe in detail government's expenditure plans over the next three financial years, also known as the MTEF (RSA 2017:9). The ENE is the explanatory memorandum to the Appropriation Bill, which sets out the aggregate amount allocated to each national government vote by programme and main economic classification as required by the Public Finance Management Act 1999.

Lienert (2010:2) states that parliament's main roles are to review and debate the government's draft future budget (including its revenue estimates and its spending plans) and to authorise spending to implement the annual budget plan. The parliamentarians discuss the overall budget,

looking at specific departments, comments or queries are discussed and clarifications are provided until members of parliament are satisfied (Sigdel 2014:12).

At this stage, the reallocation between budget elements may be possible and depending on the country's regulations, might not need legislative approval (Sofianu 2010:14). Furthermore, this author contends that reallocation may be seen as a wise decision concerning the financing of priority objectives, especially when the budgetary resources are scarce and limited.

The budget is presented by the government only after the ministry level budget discussion ends. If the majority agree with the budget, then it is approved and implemented (Sigdel 2014:12). Parliament approves resources and cash for government departments for the coming year (Iparraguirre 2010:4).

### **2.12.3 Implementation phase**

Implementation describes the concrete measures that translate strategic intent into actions that produce results (Baroto, Arvand & Ahmad 2014:50). The Ministry of Finance issues letters of authorisation to the line ministries after the budget is approved by the parliament (Sigdel 2014:14). This occurs after the funds are released by National Treasury in accordance with the approved budget. Spending proposals are reviewed by the accounting officers (i.e. Directors-General and or Chief Financial Officers) to assess whether the proposals are in line with the relevant procedures (Parliament of the Republic of South Africa 2011:25). The legislature is also responsible for authorising the minister to implement budgets of various government departments (Parliament of the Republic of South Africa 2011:25).

The implementation phase covers the activities related to the implementation of governmental policies as well as the assignments related to the supervision of the budget (Sofianu 2010:15). It is the phase in which resources are used to implement the policies aligned with the approved budget. The aim in this phase is to assess whether the initial estimations coincide with the current figures or the subsequent ones. The accounting officer, with the assistance of the chief financial officer and other senior managers, is responsible for the implementation of the budget (RSA 2000:25). They must take reasonable steps to ensure that funds are spent in accordance with the budget; expenses are reduced if expected revenues are less than projected and revenues and expenses are properly monitored (RSA 2000:25).



#### **2.12.4 Evaluation phase**

The evaluation or auditing phase involves a review of the final budget documents by independent audit institutions such as the Auditor-General (AG) and assessing the consistency of such documents against the legal authorisation (Parliament of the Republic of South Africa 2011:26). The AG examines the financial management, performance and position of each entity by scrutinising its year-end reports (i.e. annual reports). After performing his/her auditing function, the AG offers his/her opinion on the status and quality of the financial statements and management as reflected in the year-end documents.

Iparraguirre (2010:4) highlights that this stage is the process through which government department's performance is reported to Parliament. In terms of section 65 of PFMA, the Minister/MEC responsible for a department or public entity must table in the National Assembly or the relevant provincial legislature, the annual report, financial statements and audit report thereon, within one month after the accounting officer or accounting authority for the department or public entity receives the Audit Report (RSA 2002:6). Section 65(2)(a) of the PFMA requires that a minister/MEC who fails to table an annual report for an entity within six months after the end of the financial year must table a written explanation in the legislature setting out the reasons why the report was not tabled (RSA 2002:6). To ensure that parliament and the provincial legislatures can perform their oversight functions properly and in a timely manner, ministers/MECs need to table their annual reports by 30 September, in accordance with section 65 of the PFMA (RSA 2002:6).

Annual reports are the key reporting instruments for departments to report against the performance targets and budgets outlined in their strategic plans, read together with the ENE (for the national sphere) and Budget Statement Two (for the provincial sphere) (RSA 2002:8). Annual reports are therefore required to contain information on service delivery, in addition to financial statements and the audit report. The annual report is meant to be a backward-looking document, focusing on performance in the financial year that has just ended. It reports on how the budget for that financial year was implemented (RSA 2002:6).

#### **2.13 CHAPTER SUMMARY**

This chapter reviewed the literature on the notion of strategy, strategic hierarchy, strategic planning process, industrial analysis, strategic analysis and choice, strategy implementation

and control and strategic planning in the public sector. The budgeting process in the public sector and how it is implemented in government departments was clarified. The literature review highlighted the relationship that existed between planning, budgeting and reporting.

In the next chapter, a detailed description of the research design and methodology that was used will be discussed.

## **CHAPTER 3**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.1 INTRODUCTION**

The preceding chapter provided a review of the literature on strategic planning and budget process. An overview of the strategic planning, budgeting, strategy implementation and control in the public sector were also provided. The theoretical framework underpinning the study was discussed.

This chapter covers the research design that was chosen to address the research objectives and the research methodology that was utilised to achieve the empirical objectives. The research methodology included the identification of the target population, sampling frame, determination of the sample size, data collection, analysis and ethical consideration.

#### **3.2 RESEARCH DESIGN**

Mcmillan and Schumacher (2001:166) define research design as “a plan for selecting subjects, research sites, and data collection procedures to answer the research question(s)”. A research design is a systematic plan to study a problem (Hassan 2014:7). A research is valid when a conclusion is accurate or true (Akhtar & Islamia 2016:68). Furthermore, a research design is a specification of the most adequate operations to be performed in order to test a specific hypothesis under given conditions (Bless, Higson-Smith & Sithole 2013:63). The goal of a sound research design is to provide results that are judged credible (Mcmillan & Schumacher 2001:166). Creswell (2007:15) points out that the research design process begins with philosophical assumptions that the enquirers make when deciding to undertake a study. There are three types of research design, namely exploratory, contextual and descriptive casual research (Sahu 2013:26).

##### **3.2.1 Exploratory research**

Exploratory research is defined by Burns and Grove (2001:374) as “research conducted to gain new insights, discover new ideas, and for increasing knowledge of the phenomenon”. Exploratory research is described by Brink (2006:120) as research that is conducted aimed at exploring the in-depth knowledge and understanding of experiences and perceptions of a selected population groups through asking questions and probing again and again until data

saturation occurs. Babbie (2014:94) states that exploratory research seeks to satisfy the researcher's curiosity and develops approaches that can be used in subsequent studies.

### **3.2.2 Contextual research design**

Bogdan and Biklen (2003:4) assert that in contextual research, the researcher goes to the particular setting out of concern for the context. According to Babbie and Mouton (2001:272) the researcher aims to describe and understand events within the concrete, natural context in which they occur. If one understands the events against the background of the whole context, then one can truly claim to understand them (Babbie & Mouton 2001:272).

### **3.2.3 Descriptive research**

Descriptive research is defined as “research that has its main objective the accurate portrayal of the characteristics of persons, situations, or groups, and/or the frequency with which certain phenomena occur” (Polit & Beck 2008:752). Babbie's (2014:97) proposition is that a descriptive design describes certain phenomena, features, qualities and properties. This type of research illustrates a precise description of features (behaviours, opinion, attitudes, perceptions and beliefs) of individuals, situation or a group that is observed during the research process (Vanderstoep & Johnston 2009:35). In descriptive research, a researcher collects the data and analyses the trend (Peersman 2014:5). Babbie (2014:98) states that the features (behaviours, opinion, attitudes, perceptions and beliefs) and information about the population can be acquired by surveying a sample of that population. Survey research is defined as “the collection of information from a sample of individuals through their responses to questions” (Check & Schutt 2012:160).

The research design utilised in the study was a descriptive design. This study sought to investigate the perceptions and opinions of senior managers of the practice of strategic planning and budgeting processes in the selected government departments.

The next section focuses on research methodology.

### **3.3 RESEARCH METHODOLOGY**

Rajasekar, Philominathan and Chinnathambi (2013:5) define research methodology as a “systematic way to solve a problem”. It is a science of studying how research is to be carried out. Research methods may be understood as all those methods/techniques that are used for conducting research (Kothari 2004:8). According to Walliman (2011:1), research methods are the tools and techniques for doing research. Research uses data as the raw material in order to come to conclusions about some issue. It depends on the issue being investigated and what data needs to be collected (Walliman 2011:63). In other words, all those methods, which are used by the researcher during the course of studying his/her research problem.

Research methodology may be understood as the science of studying how research is done scientifically. In it, the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind them, are studied. This includes the choice of a particular kind of study or research design (e.g. a survey, experiment, case study, life history, programme evaluation and format, description of the samples and sampling procedure) (Kothari 2004:8).

Researchers have a choice of three basics methods to choose from when carrying out the business research, depending on a number of factors involved in the research, namely quantitative, qualitative and mixed-method approaches (Almalki 2016:290; Mackey & Gass 2016:3).

#### **3.3.1 Quantitative research approach**

Creswell (2014:4) refers to quantitative approach as a research approach that serves as a means to test objectives and theories by examining the relationship between two or more variables. Quantitative approach embraces an inferential approach to the relationship between theory and research (Bryman 2012:36). Blanche, Durrheim and Painter (2006:47) submit that in quantitative research, data are collected in the form of numbers and analysed by means of structured statistical methods.

In this study, a quantitative approach was used because the study sought to get a better understanding of the alignment of the strategic planning and budgeting process through

correlation and regression analyses. With quantitative research, the methodology seeks to quantify data and typically applies some form of statistical analysis; this is most often used with descriptive and casual research designs (Hair, Wolfinbarger, Ortinau & Bush 2008:81).

### **3.3.2 Qualitative research approach**

According to Santhakumaran and Sargunamary (2008:6), qualitative approach is an approach that involves a subjective exploration and evaluation of attitudes, opinions and behaviour of categorical information. Devlin (2006:53) states that the researcher uses his or her personal outlook, opinions and experience to establish and provide rich narrative descriptions of complex phenomena without formulating hypotheses. Qualitative research focuses on the quality of effects and often involves the views or internal worlds of participants and may include data generated through the use of interviews, focus groups, etc. According to Gill, Stewart, Treasure and Chadwick (2008:291), a variety of methods of data collection in qualitative research include observations, textual or visual analysis (e.g. from books or videos) and interviews (individual or group). However, the most common methods used are interviews that can be structured, semi-structured and unstructured.

### **3.3.3 Mixed approach**

Mixed methods may be defined as “research in which the investigator collects and analyses data, integrates the findings and draws inferences using both qualitative and quantitative approaches or methods in a single study” (Tashakkori & Creswell 2007:4). Mixed method incorporates elements of both qualitative and quantitative approaches. Mackey and Gass (2016:3) assert that the difference between qualitative and quantitative approach is that quantitative research generally starts with an experimental design in which a specific hypothesis precedes the quantification of data with follow-up numerical analysis, whereas in qualitative approach, experiments are generally not set up and data cannot be easily quantified.

## **3.4 THE SAMPLING PROCEDURE**

In the next section, the following steps comprising target population, sample frame, sample techniques, sample size and data collection are discussed.

### **3.4.1 Target population**

Kumar (2011:398) and Sinnaduai (2012:31) refer to a target population as a “large group of people, such as families living in an area, or people belonging to an organisation about whom you wish to collect data for your research”. For the purpose of this study, the target population was senior managers in the selected government departments who, by their nature of work, are involved directly with strategic planning and the budgeting process. Of all the government departments three were selected, namely Statistics South Africa, Office of the Public Service Commission and Rural Development and Land Reform. These government departments were willing to participate in the study and permission to conduct study was obtained with ease from them. Furthermore, these government departments were easily accessible and made data collection easier and faster. For the purpose of this study, the target population comprised of 2 500 senior managers, which comprised of male and female senior managers, namely budget analysts, managers, deputy general managers, executive managers, programme managers, deputy-director generals and director-generals from all races that have occupied these positions for more than one year on a contract or permanent basis.

### **3.4.2 Sampling frame**

A sampling frame is the list of elements from which a sample is selected (Babbie & Mouton 2010:208). This frame is necessary to arrive at an unbiased, accurate conclusion or finding because it defines the population being studied completely. A list of senior managers in the selected government departments was drawn from the database of the Human Resource Department.

### **3.4.3 Sampling technique**

It is doubtful that the researcher should be able to collect data from all cases. Sampling can be used to make inference about a population or to make generalisation in relation to existing theory (Taherdoost 2016:20). There are two types of sampling techniques that are deployed, namely probability sampling and non- probability sampling (Taherdoost 2016:20).

#### **3.4.3.1 Probability sampling**

Probability sampling means that every item in the population has an equal chance of being included in a sample (Taherdoost 2016:20). Salkind (2010:1212) states that probability

sampling ensures that no bias occurs during sampling. Probability sampling specifies that each segment of a known population will be represented in the sample (Adwok 2015:95).

According to Taherdoost (2016:20), there are a number of probability sampling methods, namely simple random sampling, systematic sampling, stratified random sampling, cluster sampling and multi-stage sampling. Babbie (2013:209) defines simple random as “a type of probability sampling in which the units composing a population are assigned numbers”. Simple random sampling is often called straight random sampling (Latham 2007:3). Simple random sampling is the basic selection process of sampling and is easiest to understand and use in assembling the sample (Frerichs 2008:1). It is also considered a fair way of selecting a sample from a given population since every member is given an equal opportunity of being selected. The randomness of probability sampling allows the researcher to use statistical inference or inferential statistics (Curtis & Curtis 2011:127). Statistical inference means drawing conclusions based on data (Bullard 2006:2). Inferential statistics allows you to make predictive inferences from that data (Andale 2015:1).

#### **3.4.3.2 Non-probability sampling**

Unlike the probability sampling method, the non-probability sampling technique uses non-randomised methods to draw the sample. The non-probability sampling method mostly involves judgment (Showkat & Parveen 2017:7). There are a number of non-probability sampling methods, which include quota sampling, snowball sampling, convenience sampling and purposive or judgmental sampling (Adams, Khan & Raeside 2014:75). Convenience sampling is a type of non-probability or non-random sampling where members of the target population that meet certain practical criteria, such as easy accessibility, geographical proximity, availability at a given time, or the willingness to participate, are included in a sample (Etikan, Musa & Alkassim 2016:2). Convenience sampling was utilised in the study since the three government departments were conveniently selected and each of the senior managers did not have an equal chance of being selected.

#### **3.4.4 Sample size**

The determination of the sample size is the technique of selecting the number of participants to include in a sample (Singh & Masuku 2014:6). Sykes, Gani and Vally (2016:1) state that samples are made in order to obtain a picture of the population as a whole without the need to make observations on every member of that population. This saves time, costs and may be the



only feasible approach because the population is infinite or dynamic, so sampling provides a snapshot at a particular moment. According to Fox, Hunn and Mathers (2009:17-18), wider population sample size is determined by the percentage of the population and 10 percent is considered acceptable and sufficient. To determine a sufficient sample from a total population of 2500, 10 percent represents a sample size of 250 deemed adequate to conduct the study and to mirror the total population under investigation. For this study, the target population was 300 to ensure larger coverage of units of analysis and a higher response rate.

### **3.4.5 Data collection**

Kothari (2004:17) indicates that when dealing with any real-life problem, it is often found that data at hand are inadequate, hence, it becomes necessary to collect data that are appropriate. Fink (2010:10) asserts that data collection is the heart of a study because it determines the validity and accuracy of the research. There are several ways of collecting the appropriate data, which differ considerably in context of costs, time and other resources at the disposal of the researcher (Kothari 2004:17). Data, in this study, were collected through a survey using a structured questionnaire.

Babbie (2014:262) defines a questionnaire as “a document comprising questions and other types of items designed to collect information appropriate for analysis. Bird (2009:1307), affirms that a questionnaire is a well-established tool within social science research for acquiring information on participant’s social characteristics, present and past behaviour, standards of behaviour or attitudes and their beliefs and reasons for action with respect to the topic under investigation. Questionnaires are used in quantitative research to profile the sample in terms of numbers (e.g. the proportion of the sample in different age groups) or to count the frequency of occurrence of opinions, attitudes, experiences, processes, behaviour, or predictions (Rowley 2014:309). Walliman (2011:190) points out that designing a questionnaire is very important as it will have a significant impact on whether the problem or gap will be solved or not. Etikan and Bala (2017:3) posit that the following aspects should be considered in designing the questionnaire:

- The researcher must have an aim and objective to achieve and keep in mind the duration of the questionnaire and the time for administering the questionnaire.

- The researcher must be familiar with the environment or subgroup of population that the questionnaire will be administered to and understand the area of the study is a key to getting a good response from a questionnaire.
- The researcher needs to communicate the reason for his/her study, his/her plan for data collection and the importance of the study to the respondent.
- The questionnaire statements should be used in a clear and unambiguous manner.
- The researcher is advised to use an existing validated instrument to avoid controversies that could pose danger to validity and reliability.

Validated instruments for strategic and budgeting process were utilised in this study. The questionnaire consisted of the following sections: Section A: Biographical information, Section B: Strategic planning and Section C: Budgeting process. A five-point Likert scale ranging from one (Strongly disagree) to five (Strongly agree) was used. Respondents were required to indicate to what extent they agreed or disagreed with statements in Section B and C of the questionnaire. The questionnaire can be viewed in Appendix B. A structured questionnaire was sent through emails to all participants to allow participants enough time to read and complete questionnaire. A total of 300 questionnaires were distributed to respondents.

### **3.5 PILOT STUDY**

The term pilot study, also called feasibility study, refers to a mini version of a full-scale study as well as the specific pre-testing of a particular research instrument such as a questionnaire or interview schedule (Van Teijlingen & Hundley 2001:1). Bless, Higson-Smith and Kagee (2006:184) define the pilot study as “a small study conducted prior to a larger piece of research to determine whether the methodology, sampling, instruments and analysis are adequate and appropriate”.

Pilot testing is part of the process of evaluating the research instrument and is not a substitute for collecting data on a population (ESCAP 2010:12). The pilot testing results should not be used to provide population estimates. The purpose is to make sure that everyone in the sample not only understands the questions, but understands them in the same way and it is done through people that represent the various subgroups within the intended sample (Fraser, Fahlman, Arscott & Guillot 2018:261-2064). It is important to test a survey questionnaire before using it to collect data.

Hassan, Schattner and Mazza (2006:70-72) add that piloting a questionnaire is necessary, although it is sometimes tempting to omit this step, especially if the main study has been reasonably well planned. The purpose is to find out if the respondent can comprehend the instructions, understand the questionnaire items, sequence of questionnaire items, terms used and the flow of statements in the questionnaire, the format, including the font and layout of the questionnaire. It also provides the researcher with an indication of the length of the time taken to complete the questionnaire.

In this study, the researcher piloted the questionnaire with 50 senior managers from the selected national government departments in order to determine if respondents could understand the questionnaire easily. A pilot study is performed to test the feasibility of techniques, methods, questionnaires and how they function together in a particular context; it can reveal ethical and practical issues that could hamper the main study (Doody & Doody 2015:1074-1075). The adjustments included an indication to the respondents of what each number of the scale meant, namely 1=strongly disagree, 2=disagree, 3=neither disagree nor agree, 4=agree and 5=strongly agree. The final questionnaire can be viewed in Annexure B. The results of the pilot study were explained in Chapter 4.

### **3.6 DATA PROCESSING**

Kothari (2004:122) states that data, after collection, have to be processed and analysed in accordance with the outline laid down for the purpose at the time of developing the research plan. Data processing entails editing, coding and tabulating. Kumar (2014:228) explains that the first step in processing data is to ensure that the data are free from inconsistencies and incompleteness. This process of cleaning is called editing; having cleaned the data, the next step is to code it.

#### **3.6.1 Editing**

Editing of data is a process of examining the collected raw data to detect errors and omissions and to correct these when possible (Kothari 2004:122). Furthermore, this author contends that editing involves a careful scrutiny of the completed questionnaires and/or schedules. Editing is done to assure that the data are accurate, consistent with other facts gathered, uniformly entered, completed and have been well arranged to facilitate coding and tabulation (Kumar 2014:228). Editing consists of scrutinising the completed research instruments to identify and

minimise, as far as possible, errors, incompleteness, misclassification and gaps in the information obtained from the respondents. Completed and retrieved questionnaires for the pilot and main studies were perused to ensure accuracy and consistency.

### **3.6.2 Coding**

Kothari (2004:123) refers to coding as “the process of assigning numerals or other symbols to answers so that responses can be put into a limited number of categories or classes”. Such classes should be appropriate to the research problem under consideration. Smith and Davies (2010:155) argue that coding does not constitute the totality of data analysis, but it is a method to organise the data so that underlying messages portrayed by the data may become clearer to the researcher. Charmaz (2006:46) describes coding as the pivotal link between data collection and explaining the meaning of the data. A code is a descriptive construct designed by the researcher to capture the primary content or essence of the data.

The questions in Section A were coded A1 to A6, for strategic planning B1 to B46 and for the budgeting process, C1 to C12. Section A was biographical information and numbers were allocated to biographical properties, for example, gender was coded as 1= male and 2= female. For sections B and C, coding to be done by providing a set of pre-arranged response alternatives to each respective questionnaire. A five-point Likert scale was used, which consisted of 1=strongly disagree, 2=disagree, 3=neither disagree nor agree, 4=agree and 5=strongly agree.

## **3.7 STATISTICAL ANALYSIS**

Harris (2007:1) indicates that statistics are a range of procedures for gathering, organising, analysing and presenting quantitative data. Furthermore, this author contends that data is the term for facts that have been obtained and, subsequently, recorded. For statisticians, data usually refer to quantitative data that are numbers. The goal of statistics is to gain understanding from data, converting collected data into readable and numerical form. Analysis results are of the utmost importance in a quantitative study (Sarantakos 2013:417). Hussain (2012:741) indicates that there are two types of statistics involved in statistical analysis, namely descriptive and inferential.

### **3.7.1 Descriptive statistics**

Patel (2009:3) contends that descriptive statistics are often used to describe variables. The purpose of a descriptive statistic is to summarise data (Mordkoff 2016:1). Descriptive statistics consists of the collection, organisation, summarisation and presentation of data (Bluman 2013:1). In summary, as the name suggests, descriptive statistics describes the population. Descriptive statistics only make statements about the set of data from which they were calculated; they never go beyond the data you have (Mordkoff 2016:1). Descriptive statistics involves description of data in terms of frequencies, proportions, mean, median, quartiles, standard deviation, inter-quartiles range etc. In this study, the frequencies, mean and standard deviation were applied (Bluman 2013:34).

According to Jaggi (2011:7), descriptive statistics is useful for summarising data. Frequency, means and standard deviations were used in this study. Frequency distribution is an organised tabulation/graphical representation of the number of individuals in each category on the scale of measurement (Manikandan 2011:54). It shows whether the observations are high or low and whether they are concentrated in one area or spread out across the entire scale. Thus, frequency distribution presents a picture of how the individual observations are distributed in the measurement scale. Mean (average) is the most common measure of central tendency and refers to the average value of a group of numbers (Sykes, Gani & Vally 2016:277). The mean in normally distributed data represents the central tendency of the values of the data. However, the mean alone is not sufficient when attempting to explain the shape of the distribution; therefore, it is deemed necessary to employ the standard deviation.

Altman and Bland (2005:903) consider the standard deviation as a measure of variability and assert that when calculation of the standard deviation of a sample is done, it is to determine the extent to which data are dispersed around the mean. The authors opine that one standard deviation around the mean is an acceptable standard deviation.

### **3.7.2 Inferential statistics**

Inferential statistics attempt to address the relation between the sample of measurements and their corresponding population which has been the drawn (Fedor-Freybergh & Mikulecký 2005:167). Andale (2014:1) argues that inferential statistics allow the researcher to make predictions (inferences) from that data. Researchers take data from samples and make generalisations about a population.

Hussain (2012:741) states that inferential statistics includes methods to generalise data findings to the related populations with a certain level of confidence and assurance of significance of results. Elst (2015:37) indicates that the objective inferential statistics is to estimate the plausibility or likelihood of hypotheses, given the observational evidence for them. Inferential statistics are used to test hypotheses about the relationship between the independent and the dependent variables and in this study, the relationship between strategic planning and budgeting process. The exploratory factor analysis, correlation analysis and regression analysis methods have been used.

### **3.7.2.1 Exploratory factor analysis**

Exploratory factor analysis (EFA) is used to extract the factor structure for any single construct or variable reducing the number of factors into smaller factors. For each factor, similar items are grouped together to create a factor, which should be pertinent to the grouped items (Pietersen & Maree 2016:242). Conducting factor analysis assists in removing low loadings and cross loadings, which would normally be illustrated in the loading matrix. The correlations between factors and items and high loadings of items signal the belongingness of items to a factor. Following this, the testing of internal consistency of each factor is done (Komorowski & Saliccioli 2016:185). EFA and how it was utilised are discussed in detail in Chapter 4.

### **3.7.2.2 Correlation analysis**

Correlation analysis is a term used to denote the association or relationship between two (or more) quantitative variables (Gogtay & Thatte 2018:78). This analysis is fundamentally based on the assumption of a linear relationship between the quantitative variables. The result of a correlation analysis is a correlation coefficient whose values range from -1 to +1. A correlation coefficient of +1 indicates that the two variables are perfectly related in a positive manner, a correlation coefficient of -1 indicates that two variables are perfectly related in a negative manner, while a correlation coefficient of zero indicates that there is no linear relationship between the two variables being studied. In this study, a non-probability convenience sampling method was used. As a result the non-parametric test, namely Spearman's correlation analysis was used to determine the relationship between variables.

### **3.7.2.3 Regression analysis**

Regression analysis allows researchers to analyse the relationship between one independent and one dependent variable (Mooi 2014:194). The key benefits of using regression analysis are, indicating if independent variables have a significant relationship with a dependent variable and the relative strength of different independent variables' effects on a dependent variable.

## **3.8 VALIDITY IN RESEARCH**

Heale and Twycross (2015:66) define validity as “the extent to which a concept is accurately measured in a quantitative study”. Validity is a test of how well an instrument that is developed measures the particular concept it is intended to measure (Thatcher 2010:125; Bajpai & Bajpai 2013:112). The term validity refers to whether or not the test measures what it claims to measure. Validity can be seen as the core of any form of assessment that is trustworthy and accurate (Bond 2003:179). The types of validity used in this study include face validity, content validity, construct validity, convergent validity and predictive validity.

### **3.8.1 Face validity**

Face validity connotes the extent to which the questionnaire is readable, relevant and the questionnaire items are representative of the research construct (Kraska-Miller 2014:19). It may also imply the extent to which the questionnaire can be comprehended by the participants in research (Perrin 2016:70). Pietersen and Maree (2016:240) contend that face validity is confirmed by the users of the questionnaire and possibly experts in the field under investigation; hence, it cannot be tested or quantified. Face validity is explained in detail in Chapter 4.

### **3.8.2 Content validity**

Content validity is a logical process where connections between the test items and the job-related tasks are established (Professional Testing 2006:1). Content validity is used to measure the variables of interest. It is also known as content-related validity, intrinsic validity, relevance validity, representative validity and logical or sampling validity (Thatcher 2010:125-141). It can be used to measure the appropriate sampling of the content domain of items in a

questionnaire (Yaghmaei 2003:25). The content validity instrument of the research instrument is explained in Chapter 4.

### **3.8.3 Construct validity**

Construct validity refers to whether you can draw inferences about test scores related to the concept being studied (Heale & Twycross 2015:66). It is concerned with the validity of empirical measures and hypothesis testing of theoretical concepts. It is the extent to which a particular measure relates to other measures consistent with theoretically derived hypotheses concerning the concepts that are being measured (Thatcher 2010:147). Construct validity tests the extent to which the construct is covered by the instrument for different groups of related items and is established using factor analysis (Perrin 2016:71). In this study, the factor analysis was performed on the constructs of strategic planning and budgeting. This aspect is explained in Chapter 4.

### **3.8.4 Convergent validity**

Convergent validity is established when the scores obtained with two different instruments measuring the same concept are highly correlated. Convergent validity shows that an instrument is highly correlated with instruments measuring similar variables (Carlson & Herdman 2012:18). The validity test relating to factors of strategic planning is explained in Chapter 4.

### **3.8.5 Predictive validity**

Predictive validity examines the extent to which factors have a predictive relationship. In other words, it tests the extent to which one factor can be explained by the occurrence of another (Taherdoost 2016:31). The hypotheses of the relationships between constructs are confirmed by the predictive validity, which in this study was confirmed by regression analysis (Mohajan 2017:19). In this study, the predictive validity was performed on the predictive relationship between the factors of strategic planning (SAA, EIA, GS, RRA, IS) and the budgeting process. This aspect is further elaborated in Chapter 4.

## **3.9 RELIABILITY IN RESEARCH**

According to Noble and Smith (2015:2), reliability is the consistency of the analytical procedures, including accounting for personal and research method biases that may have



influenced the findings. If a measurement device or procedure consistently assigns the same score to individuals or objects with equal values, the instrument is considered reliable (Bajpai & Bajpai 2013:114). In other words, the reliability of a measure indicates the extent to which it is without bias; hence, ensures consistent measurement across time and across the various items in the instruments.

Reliability refers to the consistency, stability and repeatability of results. The results of a research are considered reliable if consistent results have been obtained in identical situations but different circumstances (Twycross & Shields 2004:36). The three attributes of reliability are outlined in Table 3.1 and are explained thereafter.

**Table 3:1: Attributes of reliability**

Attributes	Description
Homogeneity (or internal consistency)	The extent to which all the items on a scale measure one construct
Stability	The consistency of results using an instrument with repeated testing
Equivalence	Consistency among responses of multiple users of an instrument, or among alternate forms of an instrument

Source: Heale & Twycross (2015:67).

### **3.9.1 Homogeneity (internal consistency)**

Internal consistency or item homogeneity is often used for estimating intra-scale reliability in terms of the item variances and covariance derived from a single occasion of measurement (Boyle 1991:2). However, Tang, Cui and Babenko (2014:206) argue that the internal consistency of a test indicates whether items on a test or a subscale of a composite test, that are intended to measure the same construct, produce consistent scores. According to Brown (2002:17), the most frequently reported internal consistency estimates are the K-R20 and Cronbach's alpha. Either one provides a sound under-estimate (that is conservative or safe estimate) of the reliability of a set of test results.

Bonett (2014:2) states that Cronbach's alpha reliability describes the reliability of a sum (or average) of q-measurements where the q-measurements may represent q-raters, occasions, alternative forms, or questionnaire/test items. When the measurements represent multiple questionnaire/test items, which is the most common application, Cronbach's alpha is referred

to as a measure of “internal consistency” reliability. The Cronbach’s alpha coefficient measure of internal consistency will be used. The reliability of the research instrument is discussed in Chapter 4.

### **3.9.2 Stability**

Bajpai and Bajpai (2013:114) define stability as “the ability of a measure to remain the same over time despite uncontrolled testing conditions or respondent themselves”. An instrument is thought to be stable or to exhibit stability when the same results are obtained on repeated administration of the instrument (Lobiondo-Wood, Haber & Singh 2014:301). Stability is an aspect of reliability and is assessed by correlating the test scores of a group of individuals with scores on the same test, or an equated test, taken by the same group at a later time (Spencer, Bornholt & Ouvrier 2003:2).

### **3.9.3 Equivalence**

Equivalence is assessed through inter-rater reliability. This test includes a process for qualitatively determining the level of agreement between two or more observers (Heale & Twycross 2015:67).

In quantitative studies, rigour is determined through an evaluation of the validity and reliability of the tools or instruments utilised in the study (Heale & Twycross 2015:67). A good quality research study will provide evidence of how all these factors have been addressed. This will help to assess the validity and reliability of the research and help to decide whether or not to apply the research findings (Heale & Twycross 2015:67).

## **3.10 ETHICAL CONSIDERATIONS**

According to Fouka and Mantzourou (2011:4), ethics is rooted in the ancient Greek philosophical inquiry of moral life. It refers to a system of principles, which can critically change previous considerations about choices and actions. It refers to “ethos” or “way of life”, “social norms for conduct that distinguishes between acceptable and unacceptable behaviour” (Shah 2011:205; Akaranga & Ongon’a 2013:8). Many societies have legal rules, which dictate behaviour, but ethical norms are broader than laws (Akaranga & Makau 2016:1). However, societies apply laws to enforce the moral standards.

Fouka and Mantzourou (2011:4) argue that ethics is the branch of philosophy, which deals with the dynamics of decision making concerning what is right and wrong. Scientific research work, as all human activities, is governed by individual, community and social values. Research ethics involve requirements on daily work, the protection of dignity of subjects and the publication of the information in the research. Researchers are professionals hence, research ethics, as a branch of applied ethics, has well-established rules and guidelines that define their conduct (Akaranga & Makau 2016:2). The ethical principles that were adhered to in this study were explained in Chapter 1.

### **3.11 CHAPTER SUMMARY**

The research design and methodology of the empirical study were discussed in this chapter. The chapter highlighted the quantitative research approach used. The sample procedure covering the target population and a list of senior managers obtained as respondents were described. The data collection method was explained and statistical methods that were used to analyse data were described. The reliability and validity issues were analysed and ethics to be considered in conducting this study were emphasised.

The next chapter presents data analysis and interpretation of the results.

## **CHAPTER 4**

### **DATA ANALYSIS AND INTERPRETATION OF RESULTS**

#### **4.1 INTRODUCTION**

In the previous chapter, the research design and methodology used in the study were discussed. This involved the identification of the target population, sampling and sample size, statistical methods utilised in the study and issues relating to reliability and validity of the research instruments.

This chapter comprises the analysis, presentation and interpretation of the findings resulting from this study. The analysis and interpretation of data is based on the results of the questionnaire and deal with a quantitative analysis of data. A brief discussion of reliability for the pilot test is provided. In this chapter, the results of descriptive statistics, EFA, correlation analysis and regression analysis are reported and interpreted.

#### **4.2 RELIABILITY FOR THE PILOT STUDY**

A pilot study was undertaken. The purpose of the pilot study was to test reliability of the pilot questionnaire and measuring instrument. Thabane, Ma, Chu, Cheng, Ismaila, Rios, Robson, Thabane, Giangregorio and Goldsmith (2010:1) report that the pilot study is considered to be a “feasibility study intended to guide the planning of a large scale investigation”. In fact, pilot studies comprise a risk mitigation strategy to reduce the chance of failure in a larger project. A structured questionnaire was administered to a group of 50 respondents from the target population.

All items, except the biographical information, were scored on a five-point Likert-type scale from one (strongly disagree) to five (strongly agree). The demographic statistics of the selected government departments reflected gender, race, highest qualification, current position and number of years in a senior position. Minor changes to the questionnaire (Section A) were made to specify and add job titles.

Cronbach’s alpha was used to provide a measure of the internal consistency of a test or scale of sections B and C. Tavakol and Dennick (2011:53) view internal consistency as the extent to

which all the items in a test measure the same concept or construct; hence, it is connected to the inter-relatedness of the items within the test. Reliability values of 0.7 or higher are considered adequate (Ursachi, Horodnic & Zait 2015:681). For the pilot study, the reliability values were .730 for strategic planning and .851 for the budgeting process, thus confirming the internal consistency of the scales (Table 4.1).

**Table 4.1: Reliability statistics of sections B and C of the questionnaire**

Reliability values of the pilot study		
	No of Items	Cronbach's alpha
Section B (Strategic planning)	46	.730
Section C (Budgeting process)	12	.851
Reliability values of the main study		
	No of Items	Cronbach's alpha
Section B (Strategic planning)	46	.930
Section C (Budgeting process)	12	.845

For the main study, the reliability results shown in Table 4.1 indicate that the items of the measuring instrument sufficiently encapsulated the essence of the study in respect of strategic planning and budget process. The Cronbach alpha value for strategic planning was 0.930 and 0.845 for the budgeting process.

### 4.3 ANALYSIS OF THE MAIN SURVEY

Subsequent to the pilot study, two items were included in the new questionnaire under biographical information. 300 questionnaires were distributed for the main study, of which 203 were completed and returned, resulting in a response rate of 67.6 percent. Rubin and Babbie (2011:389) confirm that response rates of 60 percent and above are good response rates to run statistical analysis and reporting.

The analysis of the main survey results is presented in the next sub-section.

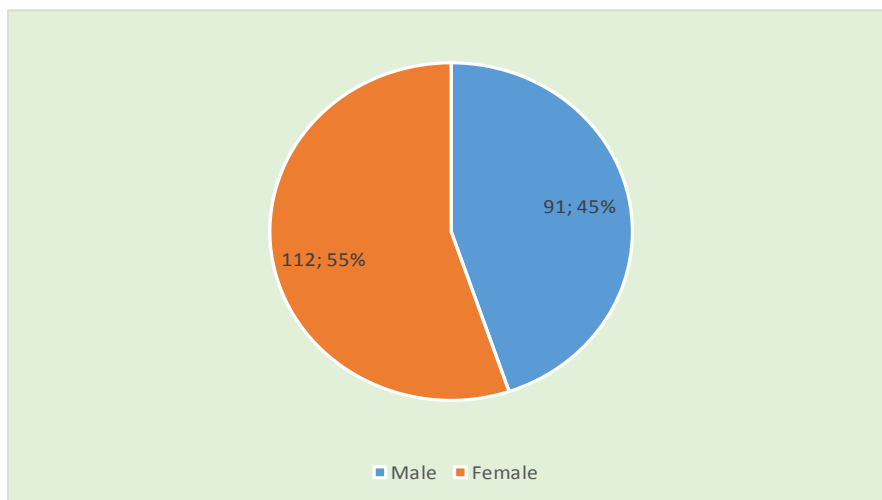
#### 4.3.1 Biographical information

In this section, the biographical data of Section A of the questionnaire was analysed by means of descriptive statistics. Section A consisted of the following biographical properties: gender, race, highest qualification, current position and number of years in a senior position. This study

made use of graphical representations in the form of pie charts and column charts to present the analysed data on the six items in Section A of the questionnaire.

#### 4.3.1.1 Gender

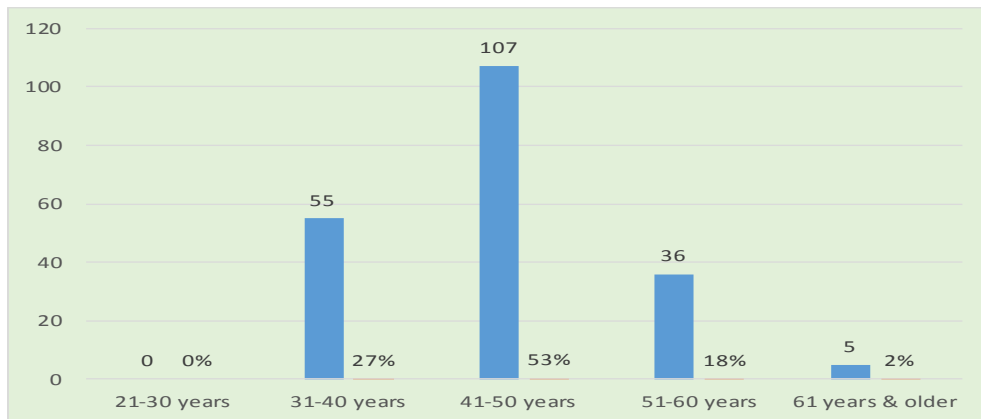
Figure 4.1 indicates that out of 203 respondents, 91 were males (45%; n=91) and 112 were females (55%; n=112). The higher number of females employees could be attributed to the transformation agenda in the government departments by which equity plans have to be drawn with an objective to recruit female employees in the government departments.



**Figure 4.1: Gender**

#### 4.3.1.2 Age category

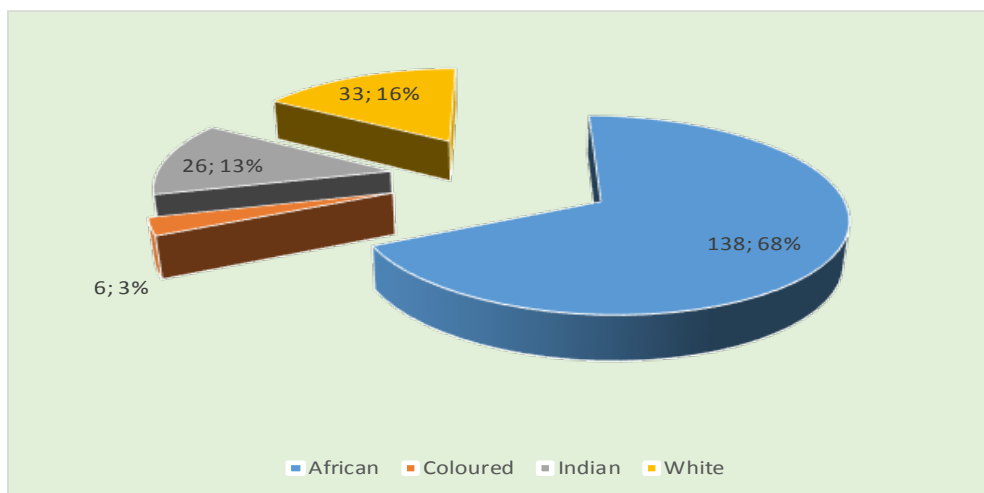
Figure 4.2 reports on the age of respondents. The age group 41-50 years comprised the highest percentage (53%; n =107), followed by the following age groups: 31-40 years (27%; n=55); and 51-60 years (18%; n = 36), while the age group of 61 and older years consisted of the smallest percentage of respondents (2%; n=5). There were no employees in the age group of 20-30 years, which is an indication that the government departments were not hiring younger employees. The experience required could be a hindrance to entry in the government departments for younger employees.



**Figure 4.2: Age category**

#### 4.3.1.3 Race

Figure 4.3 revealed that the majority of the respondents were African (68%;  $n=138$ ), followed by Whites and Indians (16%;  $n=33$ ) and (13%;  $n=26$ ) respectively. The lowest number of respondents were Coloureds (3%;  $n=6$ ) of the sampled respondents. The implementation of the employment equity could account for the high number of African employees in the government departments.

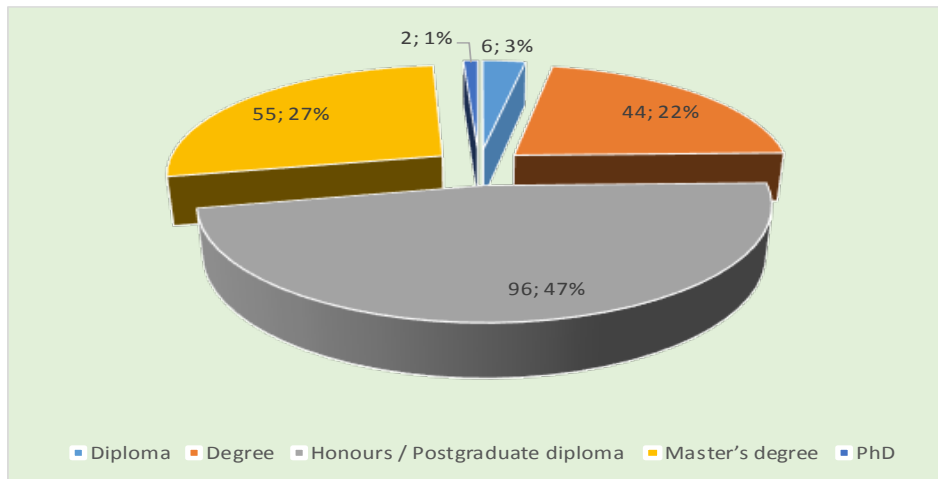


**Figure 4.3: Race**

#### 4.3.1.4 Highest qualification

Figure 4.4 showed that the majority of respondents (47%;  $n=96$ ) had an honours or postgraduate certificate. Respondents with a Master's degree comprised 27 percent ( $n=55$ ) of the sampled respondents, while those who were in possession of a degree made up 22 percent ( $n=44$ ) of the sampled respondents. Respondents with a Diploma and a PhD constituted 3

percent (n =6) and 1 percent (n=2) of the sample respectively. The acquisition of qualifications by majority of employees could be attributed to the promulgation of the Skills Development Act by which private and public entities would receive skills levy if they advanced the training of employees.

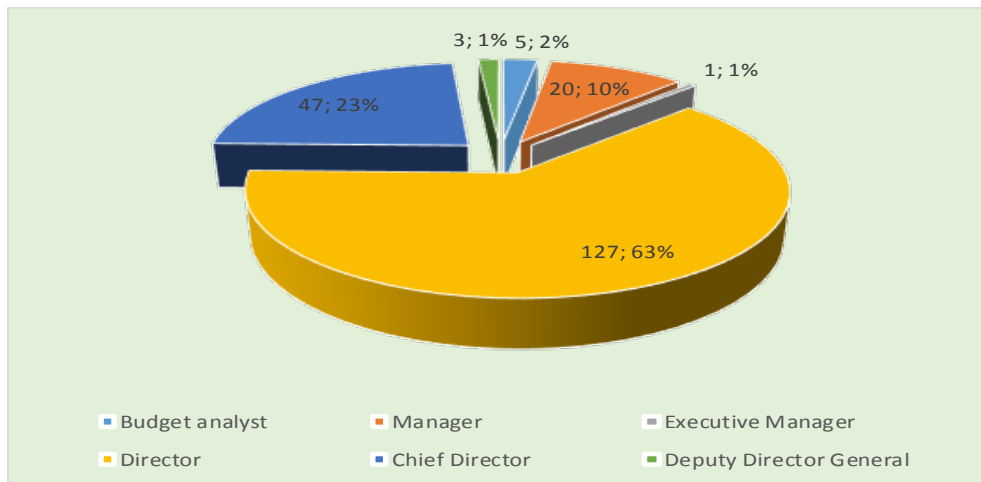


**Figure 4.4: Highest qualification**

#### **4.3.1.5 Current position**

Figure 4.5 indicated that the majority of respondents were directors (63%; n =127), followed by chief directors and managers consisting of 23 percent (n =47) and 10 percent (n=20) of sampled respondents respectively. Budget analysts and deputy-director generals comprised 2 percent (n =5) and 1 percent (n =3) of the sample respectively. The lowest percentage (1%; n=1) of respondents was made up of executive managers. The spread of employees according to the position shows a bell-shape spread which is satisfactory and augurs well for the research in terms of normal distribution of data.

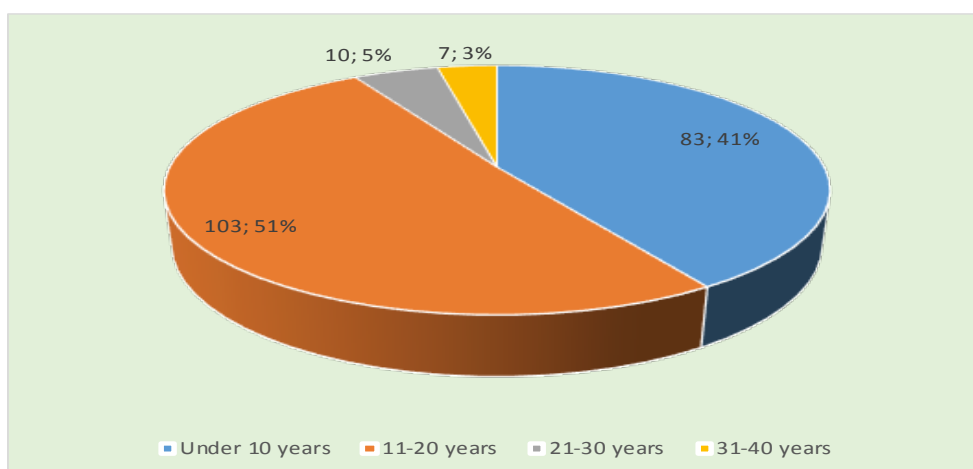




**Figure 4.5: Current position**

#### 4.3.1.6 Number of years in senior management position

An analysis of data in Figure 4.6 illustrated that the highest number (51%; n =103) of respondents had been working in senior management positions in the government department for 11- 20 years. This was followed by 41 percent (n =83) of respondents who occupied a senior management position for a period under 10 years. Other respondents who had been in senior management positions between 21- 30 years and 31-40 years constituted 5 percent (n =10) and 3 percent (n=7) of the sample respectively. The spread is an indication that government departments were in serious recruitment drive in the last ten years. The recent reduced recruitment drive could have been the result of the national plan to reduce the salary costs, which have represented a huge portion of the budget in government departments.



**Figure 4.6: Number of years in senior management position**

The following section explains how the EFA was used in extracting salient factors in Section B of the research instrument.

#### **4.4 EXPLORATORY FACTOR ANALYSIS (EFA)**

Samuels (2016:1) asserts that EFA is a process that can be carried out to validate scales of items in a questionnaire that have not been validated. There are two ways in which EFA can be carried out, namely factor analysis (FA) and principal component analysis (PCA) (Samuels 2017:1). This author reports that the reduced dimensions produced by FA are known as factors, whereas those produced by a PCA are known as components.

##### **4.4.1 Factor analysis**

Balasundaram (2009:1) opines that FA attempts to simplify complex and diverse relationships that exist among a set of observed variables by uncovering common dimensions or factors that link together the seemingly unrelated variables and consequently provide insight into the significance of the underlying structure of the data. Put differently, the aim in FA is to summarise data so that relationships and patterns can be easily interpreted and understood. This implies that the variables in the research instrument are grouped into limited clusters based on a shared variance (Yong & Pearce 2013:79).

In this study, FA was performed on Section B (strategic planning) to extract a number of factors for the construct of strategic planning with the aim of ascertaining commonalities and differences in the underlying set of variables (Tabachnick & Fidell 2007:402). Before performing the EFA, two tests, namely Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity were conducted to determine if the data set was really appropriate for FA (Hadi, Abdullah & Sentosa 2016:216).

##### **4.4.1.1 Kaiser-Meyer-Olkin (KMO) and Bartlett's test**

The KMO and Bartlett's tests were conducted prior to FA and the test results are shown in Table 4.2. It is recommended that for the data set to be deemed appropriate for FA, the Kaiser-Meyer Olkin sampling adequacy should be 0.5 and above (Malhotra 2006:612). It can be observed from Table 4.2 that the value of 0.613 was above the threshold level of 0.5. Further to this, the Bartlett's test results indicated the significance level value of 0.000, which was within the required threshold of  $p < 0.05$  (Malhotra 2006:612). The Bartlett's test reaffirmed that

the FA procedure was appropriate for the dataset. In the following sub-sections the extraction of factors and the factor structure of Section B of the questionnaire are described.

**Table 4.2: KMO and Barlett's test of sphericity**

<b>Kaiser-Meyer-Olkin measure of sampling adequacy</b>		<b>.613</b>
Barlett's test of sphericity	Approx. chi-square	13530.451
	df	1.035
	Sig.	.000

#### **4.4.2 Extraction of factors**

The factors of strategic planning were extracted by means of principal component analysis. The principal component analysis (PCA) is a technique that is used “to reduce a larger set of variables (items) into a smaller set of factors, called components in PCA, which account for most of the variances in the original variables” (Gorsuch 2015:105). Williams, Brown and Onsman (2012:6) points out that data extraction is used as a method of reducing enormous items to smaller representative factors using appropriate criterion. Other than reducing the number of variables, the principal component analysis assists in finding relationships between observations, including detection and removal of outliers (Tharwat 2016:2). Extraction of factors could be achieved in three ways, namely percentage of variance, scree plot and eigen value methods. Suhr and Shay (2009:5) advise that no single criterion should be assumed as the only criterion. Based on this advice, all three methods were used to extract the factors.

##### **4.4.2.1 Percentage of variance**

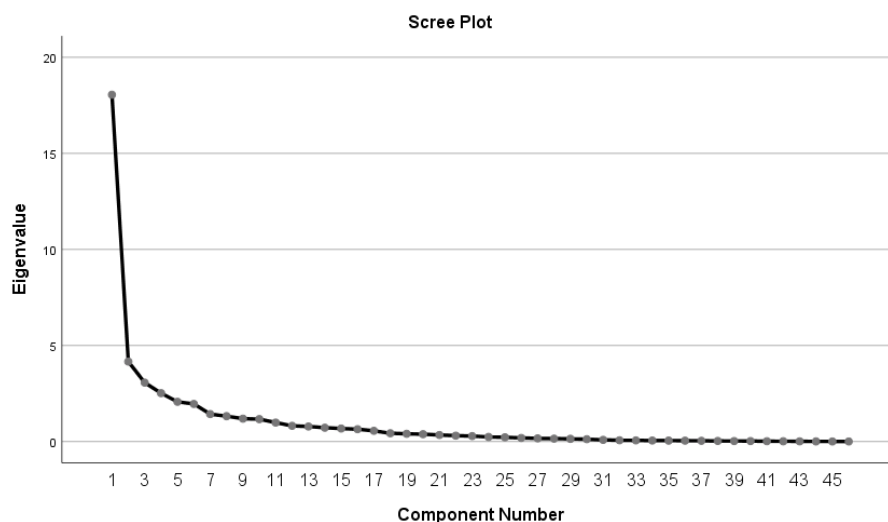
According to Plonsky (2015:194), percentage of variance approach implies that the number of factors extracted is determined so that the cumulative percentage of variance extracted by the factors reaches a satisfactory level. The author advances that the factors extracted should account for at least 60 percent of the variance to be retained as sufficient factors. Using the percentage of variance, 10 factors were extracted with eigen values greater than one (Table 4.3). Table 4.3 shows the percentage of variance for each factor and the cumulative percentage of variance for all 10 factors, which was recorded at 80.269 percent. This cumulative percentage of variance is above the recommended threshold of 60 percent.

**Table 4.3: Percentage of variance and Eigenvalues of strategic planning**

Component	Eigenvalues	% of variance	Cumulative %
1	39.240	15.000	15.000
2	9.047	14.394	29.395
3	6.665	10.591	39.986
4	5.471	9.780	49.765
5	4.498	7.396	57.162
6	4.256	6.624	63.785
7	3.103	4.911	68.696
8	2.867	4.403	73.100
9	2.589	4.019	77.119
10	2.533	3.150	80.269

#### 4.4.2.2 Scree plot

Tai (2005:194) considers a scree plot as a “plot of the eigenvalues against the number of factors in order of extraction”. According to the author, the scree plot is a graphical tool used in the selection of the number of relevant components or factors to be considered in principal component analysis or factor analysis. Furthermore, the shape of the scree plot indicates the cut-off of the number of factors. Where the scree plot tapers off is normally considered the number of factors of the construct. Figure 4.7 illustrates the scree plot used in respect of 46 questionnaire items.



**Figure 4.7: Scree plot**

Looking closely at the scree plot, it can be noticed that the graph tapers off at the tenth factor. The conclusion is that 10 factors were extracted. However, it cannot be concluded with certainty that there were 10 factors as this conclusion depends on how one observes the

tapering-off point in the graph. For this reason, the use of other objective methods like the eigen value are necessary to overcome this weakness (Braeken & Van Assen 2016:1).

#### **4.4.2.3 Eigenvalues**

Using the eigen value method of extraction, all factors with eigen values greater than one should be retained. This is in compliance with the K1 rule or Kaiser Guttman rule (Goodwyn 2012:6). According to the author, a factor with an eigenvalue greater than one has a more predictive power than measured factors with eigen values less than one. Table 4.3 illustrates the eigen values of the factors for strategic planning. It is clear that the first 10 factors had eigen values greater than one, thereby confirming that 10 factors were extracted for the construct of strategic planning.

Working with 10 factors would have been a complex task that could have led to the dilution of the factors. In addition to this, the previous study proposed a five-factor structure of strategic planning (Černiauskienė 2014:49-51). In light of these reasons, the Brian O'Connor parallel analysis was undertaken to determine and confirm the number of factors for strategic planning. The results of analysis are captured in Table 4.4. Using analysis, only six factors were retained. According to O'Connor, the raw values in the raw data column should always be greater than values in the percentile column for the factor (reference to root in the table) (O'Connor 2000:398). Following this proposition, the values for factors 1 to 6 in the raw data were greater than values in the percentile column. From root/ factor 7, the values in percentile were beginning to be greater than values in the raw data column. These factors were then discarded, thus necessitating the retention of the first six factors.

The new percentage variance and cumulative percentages, which were different from those in Table 4.3, were also reflected. These were computed based on the view that the extracted factors should be six instead of ten. The cumulative percentage variance was 69.117, which was still an acceptable threshold.

**Table 4.4: results of parallel analysis**

Root	Raw Data/Eigen value	Means	Percentile	% Variance	Cumulative % Variance
1.000000	18.050508	2.059101	2.166890	19.227	19.227
2.000000	4.161607	1.940960	2.023492	15.912	35.140
3.000000	3.065790	1.853794	1.926505	12.272	47.412
4.000000	2.516631	1.780018	1.841390	8.725	56.137
5.000000	2.068897	1.707827	1.771268	8.338	64.475
6.000000	1.957888	1.646033	1.697626	4.702	69.177
7.000000	1.427583	1.586617	1.639201		
8.000000	1.318863	1.533376	1.582558		
9.000000	1.190734	1.483623	1.526978		
10.000000	1.165345	1.439541	1.481702		

#### 4.4.3 Rotation and factor loading matrix

Once the six factors were extracted, the next logical step was to establish the loadings of variables per factor. All variables will be attached to each factor with various loadings ranging from .000 to 1.000. A variable is accepted as having loading sufficiently on a factor if the loading is above 0.5 (Field 2000:446). The loadings will assume an unrotated pattern in a matrix, which should be rotated to create output that is understandable and a factor structure that is simple (Hadi, Abdullah & Sentosa 2016:217). Pallant (2013:184) adds that factor rotation changes the pattern of the unrotated factors and increases the understanding of each factor by presenting the pattern of loadings in a manner that is easier to interpret and understand (Pallant 2013:184). The varimax rotation with Kaiser Normalization was used to generate the factor loading matrix, which can be observed in Table 4.5. Variables with loadings less than 0.5 were suppressed. These variables were B4, B6, B7, B8, B29, B35, B41, B42 and B46. These variables were excluded from the matrix. Further to this, the variable that had cross-loading, namely B5, was also discarded. The result was the final factor structure represented in Table 4.5, which composed of five factors. This final factor structure is consistent with the

finding of the previous study, which purported a five-factor structure for strategic planning (Wauters 2017:99).

In Table 4.5, the labelling of the factors and attendant questionnaire items with corresponding values are reflected. The labelling of the factors and a discussion of each factor is addressed in the following section.

**Table 4.5: Final factor structure**

	<b>Factors and variable descriptions</b>	<b>Factor 1</b>	<b>Factor 2</b>	<b>Factor 3</b>	<b>Factor 4</b>	<b>Factor 5</b>
	<b>Factor 1: Strategic analysis and assessment (SAA)</b>					
B24	The Department analyses its own core business operations objectively	.546				
B25	This internal analysis identify the key strengths and weaknesses of the organisation	.706				
B26	The analysis include political and other external factors, which affect your Department's budget	.762				
B27	It includes a consideration of budgetary allocation for promotion of the Department's activities	.709				
B28	It includes quality of customer service and, in general, employee productivity	.672				
B31	After completing its external and internal analyses, The Department reviews the mission and goals in light of the apparent threats/opportunities and strengths/weaknesses	.734				
B32	Based upon such a review, strategic diagnosis culminates in identifying key strategic issues (e.g., redeployment of staff, change in direction of activities)	.755				
B33	The Department uses strategic (situational) diagnosis to formulate strategic plan options	.818				
B34	The Department considers performance enhancement options (e.g., cost reduction, alternative suppliers, production technique improvement)	.804				
B37	The Department considers research and development options (e.g., product/service enhancement, new products)	.639				
B38	Formal evaluation study findings are factored into the Department's strategic planning process	.637				
B40	The Department makes strategic decisions (implementation action plans) based upon the strategic plan	.593				
B45	The Department reviews monitoring data regularly, and revise strategic decisions as appropriate	.576				
	<b>Factor 2: Environmental impact assessment (EIA)</b>					
B16	The Department periodically gathers information about its customers, stakeholders and other external factors that affect its operations		.749			

	Factors and variable descriptions	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
B17	The external/market analysis identify threats to the Department's key opportunities		.855			
B18	The analysis include detailed analysis of the Department's geographical target audiences		.784			
B19	The Department's performance and operational characteristics are compared on a regular basis to its perceived "competitors"		.735			
B20	Demographic, behavioural, and other trends among the Department's customers and potential customers are analysed		.827			
B21	The Department regularly assesses its operating environment as a whole, weighing new competitors and concepts, new technologies, procurement practices, labour practices, etc.		.734			
B22	The Department assesses factors such as the cost and availability of funds, electioneering and politicking, government regulations, and the economy		.583			
B23	The Department has knowledge of and access to sources of information about its customers, stakeholders, and other external factors		.566			
	<b>Factor 3: Goal setting (GS)</b>					
B9	The Department has written longer-term goals (3-5 years) and short-term (1 year and less) goals			.653		
B10	These goals list quantified measurable targets (e.g., how many customers will be served?)			.664		
B11	The goals specify targets by region			.757		
B12	When appropriate, the goals list quality, time frame, and cost targets. They are observable or measurable			.741		
B13	The goals appear realistic yet challenging, based upon experience and/or customer research			.760		
B14	The Department has information systems in place, which facilitate measuring actual performance versus goals			.615		
B15	Management and higher-level staff whose responsibilities are affected participate in setting goals			.753		
	<b>Factor 4: Responsibilities and resources allocation (RRA)</b>					
B1	Top executives take formal responsibility for the Department's strategic planning				.823	
B2	Strategic planning is a top priority activity that is performed on a regular basis (e.g. each year)				.736	
B3	The Department provides resources (managers' time, staff support, etc.) for strategic planning implementation				.667	
B4	The Department consistently follows a defined set of procedures in its strategic planning process				.512	
	<b>Factor 5: Information systems (IS)</b>					
B30	The Department's management information system provides relatively easy access to the internal data discussed above					.630



	Factors and variable descriptions	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
B36	The Department considers management options (such as restructuring, merging with other agencies)					.582
B44	The Department develops an organised system for monitoring how well those performance standards are met					.545

Extraction method: Principal component with Varimax rotation and Kaiser normalisation

After the extraction of factors, the dimensions are labelled, taking into account the suitability of the variable loading within each dimension.

#### 4.4.4 Naming and interpretation of factors

Factor 1 was labelled strategic analysis and assessment (SAA), which consisted of 14 items and the variance explained by factor was 19.227 percent. Its factor loadings, as reflected in Table 4.5, were greater than 0.5 and were considered acceptable. The strategic analysis and assessment means that the various government departments' internal and external analysis is performed with a view to formulate strategic plan options to pursue. This view is shared by Downey (2007:3), who affirms that strategic analysis involves a research on the business environment within which the organisation operates and on the organisation itself in order to formulate a strategy. Sullivan (2006:1) concurs that every leader of every organisation should periodically do a strategic assessment collaboration with key critical stakeholders to develop strategic plans that s/he intends to implement. According to Gurel (2017:1005), if the technique is used properly, it can provide a good basis for strategy formulation. In government departments, senior management can use a strategic analysis and assessment to review service delivery needs and the level of service needed to meet government and departmental strategic priorities and outcomes (RSA 2008:5).

Factor 2, was labelled environmental impact assessment (EIA) and it comprised eight items. This factor was considered significant and accounted for 15.912 percent of the variance. Its factor loading was greater than 0.5 and was within the required threshold. McNabb (2013:271) considers loadings greater than 0.5 worth including in the factor and in the interpretation of results. Kalita's (2016:50) assertion is that environmental impact assessment is the formal process used to predict the environmental consequences (positive or negative) of a plan, policy, program or project prior to the decision to move forward with the proposed action. Furthermore, the author indicates that formal impact assessments may be governed by rules of

administrative procedure regarding public participation and documentation of decision making and may be subject to judicial review. The research results confirmed that in government departments, conducting environmental impact assessment is a critical part of the strategic planning process. During the process, government departments consider a number of variables, which include legislation, with potential impact on the government department's operations, geographical location, targeted clients, consultation with internal and external stakeholders, identification of stakeholder's needs and expected cost implications of operations. The consideration of relevant information relating to these variables could assist to anticipate the likely impact of the strategic plan of these variables once it is implemented (Rushton 2012:1)

Factor 3 was named goal setting, consisted of seven items and the variance explained by factor was 12.272 percent. Goal setting means identification or formulation of a goal to be achieved by the government department. Lunenburg (2011:2) concurs that goal setting is like a map, the big picture of a goal, which is deemed the destination and it can be short or long-term goals.

Heslin, Carson and VandeWalle (2009:89) contend that the most effective performance seems to result when goals are specific and challenging, are used to evaluate performance, linked to feedback on results and create commitment and acceptance. The results of the study indicated that goal setting is considered an essential element of strategic planning.

Factor 4 was labelled responsibilities and resource allocation, comprised four items and the variance explained by factor was 8.725 percent. Implicit in the factor is that the achievement of strategic objectives is largely driven by the deployment of resources to put specific plans into action. Accompanied with this should be clear assigning of responsibilities to execute those actions that are necessary for the attainment of strategic objectives (Jabbar & Hussein 2017:100-104). Resources are either tangible or intangible and can be controlled or owned by the government department. They could also be financial or physical assets, such as property, plant or equipment. Added to the list are expertise, which can be traded (e.g. patents and licences) and human capital (e.g. talent, expertise and experience) (Amit & Schoemaker 2016:1). Othman, Arshad, Aris and Arif (2014:121) contend that resources are an essential factor that influence competitive advantage and performance. The argument of the authors is that the manner of deployment of resources determines the extent to which organisations are effective and efficient.

Factor 5 was coined information system, constituted three items and the variance explained by factor was 8.338 percent. Information system denotes access to information for purposes of strategic planning and provision of adequate information about service offerings and their use to customers. Kamariotou and Kitsios (2018:2) opines that a strategic information system has the great ability to shape the strategy of a business by using information technology infrastructure, which integrates phases of strategic planning. The integration and seamless occurrence of strategic planning phases provides organisations with a competitive edge.

The following section reports on the overall mean scores of the items in sections B and C, which bear reference to strategic planning and budgeting process respectively.

#### **4.5 OVERALL MEANS FOR SECTIONS B AND C**

Lee and Lee (2015:220) assert that the mean in normally distributed data represents the central tendency of the values of the data. The authors caution that the mean alone is not sufficient when attempting to explain the shape of the distribution, a situation which calls for the use of standard deviation (SD) along with the mean to report statistical analysis results.

Before calculating the means for strategic planning, factor analysis was performed, which extracted five factors that were explained in Section 4.4.4. In this section, the means of these factors are discussed, including the overall mean of the construct of strategic planning. The purpose of calculating the mean scores was to determine the level of strategic planning and the budgeting process in selected national government departments.

##### **4.5.1 Means for factors of strategic planning**

From the factor analysis procedure, five factors were extracted and are shown in Table 4.6, together with their means. In this table, the summary of the minimum and maximum values based on a five-point Likert scale, standard deviations and mean scores of the five factors of strategic planning are reflected. The minimum score value was one and the maximum score value was five. Scores above 3 and less than 4 were deemed to indicate partial agreement whereas those less than less than 3 and above 2.5 were considered to signal partially disagreement. This interpretation applied for both strategic planning and the budgeting process. The overall mean score of 3.14 for all the factors of strategic planning indicated that respondents partially agreed that strategic planning was performed in the selected government

departments. The overall standard deviation (SD=0.965) indicated a satisfactory distribution of scores around the mean.

**Table 4.6: Means for strategic planning**

<b>Factors</b>	<b>No of respondents</b>	<b>No of items</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Deviation</b>
Factor 1: Strategic analysis and assessment (SAA)	203	9	1	5	2.97	0.925
Factor 2: Environmental impact assessment (EIA)	203	8	1	5	2.91	0.926
Factor 3: Goal setting (GS)	203	5	1	5	3.55	1.077
Factor 4: Responsibilities and resources allocation (RRA)	203	4	1	5	3.68	0.975
Factor 5: Information systems (IS)	203	4	1	5	2.60	0.921
<b>Overall score for mean and std. deviation</b>					<b>3.14</b>	<b>0.965</b>
<b>Scale item rating: 1=Strongly disagree; 2=Disagree; 3 = Neither disagree or agree; 4 = Agree; 5 = Strongly agree</b>						

The results imply that internal strengths and weaknesses of the departments were assessed to identify resources, human or financial, that could be utilised to leverage the attainment of strategic objectives and enhance performance. In simple terms, SWOT analysis was conducted during the strategic planning process.

The further implication of the results was that consultation was made with those expected to be impacted by the strategic plans to determine the acceptability or desirability of the impact. Further to this, factors in the market (competitors, suppliers, new entrants, rivalry of competitors) were appraised to establish their potential impact on strategic planning.

The results demonstrated that goal setting was performed during strategic planning in the selected government departments. According to the respondents, senior managers engaged in the goal setting process, which followed the SMART principles, namely measurable, attainable, realistic and timely. Furthermore, during the goal setting process managers at all levels participated in specifying targets that should be achieved. This manner of goal setting engendered commitment and a sense responsibility and accountability from participants.

The data also showed that senior managers took responsibility for strategic planning and that roles were clearly assigned to them and were properly delegated to their subordinates. The

mean results also indicated that resources such as equipment, human and finance were allocated to ensure that actions geared towards implementing strategic plans were indeed carried out.

Finally, it emerged from the findings that IT infrastructure was deployed successfully by means of which information technology such as computer, software database, communication systems were used to integrate tasks and actions of both strategic planning and the budgeting processes. Good use of the information system was made to continually inform various stakeholders of the strategic planning and budgeting processes.

#### **4.5.2 Means for Section C: Budgeting**

Table 4.7 presents a summary of the minimum and maximum values based on five-point Likert scale, standard deviation and mean scores of the budgeting process in the selected government departments.

The items of the budgeting scale were negatively worded and were reverse coded using SPSS. For the budgeting process, the minimum score value was one and the maximum score value was five. The overall standard deviation ( $SD=1.110$ ) of budgeting indicated a satisfactory distribution of data around the mean (Altman & Bland 2005:903).

The respondents partially agreed with all these items as reflected by the overall mean result ( $M=3.08$ ). The results affirm that budgeting was considered an important process, which was strategically focused and geared towards bringing the necessary planned change to the selected government departments. Respondents partially agreed that the budgeting process was not time consuming and costly exercise for which ample time was provided in their preparation. It is evident from the data that respondents' view was that they did not feel undervalued as participants in the budgeting process. It also emerged that respondents were of the opinion that budgeting was not a 'gaming' exercise, which involved guess work, but a more structured process performed annually, aimed at cost reduction and value creation.

**Table 4.7: Means for budgeting**

Item	No of respondents	Min	Max	Mean	Std. Deviation
C1: Budgets are time consuming and costly to put together	203	1	5	2.68	1.242
C2: Budgets constrain responsiveness and flexibility and are often a barrier to change	203	1	5	2.62	1.246
C3: Budgets are rarely strategically focused and are often contradictory	203	1	5	3.06	1.139
C4: Budgets add little value, especially given the time required to prepare them	203	1	5	3.55	1.109
C5: Budgets concentrate on cost reduction and not on value creation	203	1	5	3.07	1.094
C6: Budgets strengthen vertical command and control	203	1	5	2.82	.770
C7: Budgets do not reflect the emerging network structures that organisations are adopting	203	1	5	2.92	1.096
C8: Budgets encourage 'gaming' and perverse behaviours	203	1	5	3.24	1.204
C9: Budgets are developed and updated too infrequently, usually annually	203	1	5	3.27	1.094
C10: Budgets are based on unsupported assumptions and guess-work	203	1	5	3.25	1.161
C11: Budgets reinforce departmental barriers rather than encourage knowledge sharing	203	1	5	2.87	1.155
C12: Budgets make people feel under-valued	203	1	5	3.60	1.007
<b>Overall score for mean and std. deviation</b>				<b>3.08</b>	<b>1.110</b>
<b>Scale item rating: 1=Strongly disagree; 2=Disagree; 3=Neither disagree or agree; 4=Agree; 5=Strongly agree</b>					

## 4.6 CORRELATION ANALYSIS

Kumar and Chong (2018:1) view correlation analysis as an extensively used technique that identifies interesting relationships in data. Gogtay and Thatte (2017:78) add that correlation denotes the association or relationship between two (or more) quantitative variables. Furthermore, these authors contend that the result of a correlation analysis is a correlation coefficient whose values range from -1 to +1. A correlation coefficient of +1 indicates that the two variables are perfectly related in a positive linear manner; a correlation coefficient of -1 indicates that two variables are perfectly related in a negative linear manner and a correlation coefficient of zero indicates that there is no linear relationship between the two variables being studied.

In this study, the Spearman's correlation coefficient was utilised to determine the strength and direction of the relationship between the factors of strategic planning, strategic analysis and assessment (SAA), environmental impact assessment (EIA), goal setting (GS), responsibilities

and resources allocation (RRA), information systems (IS) and the budgeting process (BP). Willemse (2009:119) reports that the strength of correlations between variables can be very weak (0.0 – 0.1), weak (0.1 – 0.3), moderate (0.3 – 0.5) or strong (0.5 – 1.0). The results of the correlation analysis are illustrated in Table 4.8.

**Table 4.8: Correlation analysis**

		BP	SAA	EIA	GS	IS	RRA
<b>BP</b>	Spearman Correlation Sig. (2-tailed)	1					
<b>SAA</b>	Spearman Correlation Sig. (2-tailed)	.327** .000	1* .				
<b>EIA</b>	Spearman Correlation Sig. (2-tailed)	.274** .000	.668** .000	1 .			
<b>GS</b>	Spearman Correlation Sig. (2-tailed)	.183* .000	.436** .000	.404** .000	1 .		
<b>IS</b>	Spearman Correlation Sig. (2-tailed)	.338** .000	.625** .000	.601** .000	.270** .000	1 .	
<b>RRA</b>	Spearman Correlation Sig. (2-tailed)	.232** .062	.485** .000	.405** .000	.387** .000	.459** .000	1 .

\*\* . Correlation is significant at the 0.01 (2-tailed)

Strategic analysis and assessment showed a moderate positive significant correlation with the budgeting process ( $r=.327$ ;  $p<.000$ ). The analysis indicates that before the budgeting process is performed, senior officials in government departments assess the current performance in order to review service delivery needs, target and then align the budget with strategic priorities to meet the government mandate. This finding is consistent with the finding of Lanzkron (2017:3) that best practice in budgeting and strategic planning processes is to create a closer link between strategy and operations. This assertion is amplified by Sammut-Bonnici and Galea (2015:1) who view the internal and external environmental analyses as critical to the identification of the financial resources needed to implement the strategy. According to Murtada and Hamdan (2016:259), where strategic planning is implemented effectively, there tends to be a unity of procedures, systematisation of work and cash planning to operations, which contribute to the improvement of the effectiveness of monetary planning, culminating in the effective management of public funds.

Environmental impact assessment showed a weak, positive, significant correlation with the budgeting process ( $r=.274$ ;  $p<.000$ ). This implies that if senior officials have considered the likely impact of strategic planning, they should be able to budget accordingly, to finance those

projects and programmes that will realise the desired impact. Wu and Ma (2019:2) express the view that pertinent information should be considered and mined sufficiently to inform strategic decisions on viable strategic options. The information should be relevant, current and useful in order to predict accurately the impact of any strategic option. Van Buuren and Nooteboom (2009:145) add that a strategic option should be reflected in the budget if it is to be implemented effectively to bear desired results.

A weak positive significant correlation between goal setting and the budgeting process was observed ( $r=.183$ ;  $p<.000$ ). The finding highlighted that the predetermined goals during the strategic planning process were used as a basis for budget allocations in the selected government departments. Consistent with this view, Huang (2019:303) asserts that the primary purpose of budget management is not only to determine what can be done with the resources available, but also to push a company forward and help it achieve goals. Ndiwalana (2002:36-37) maintains that budgets are prepared in a way that encourages growth and budget allocation is aligned with the company's strategy.

A weak, positive significant correlation between responsibilities and resource allocation and the budgeting process was confirmed ( $r=.232$ ;  $p<.000$ ). The implication of this finding is that in the selected government departments, the budget is set aside to the fund particular actions to be carried out in the achievement of strategic objectives. This view is also held by Brits (2010:119) who argues that no strategic plans can be successfully implemented without due consideration of the required resources to achieve those strategic plans. These essential resources should form the bedrock of the budget allocations within the strategy implementation period (Mihaila, Ghedrovici & Badicu 2015:59) Further to this, pertinent actions necessary for achieving strategic objectives should be catered for in the budget allocations (Huang 2019:303).

Lastly, a moderate, positive significant correlation existed between information system and the budgeting process ( $r=.338$ ;  $p<.000$ ). The results of the correlation implied that government departments integrate information using IT infrastructure to realise aligned implementation of the strategic planning and budgeting processes. This view is embraced by Diamond and Khemani (2006:98) who advance that information systems are used to provide valuable information for the implementation of the budgeting process. Additionally, various stakeholders should readily and timeously be informed about the processes of strategic



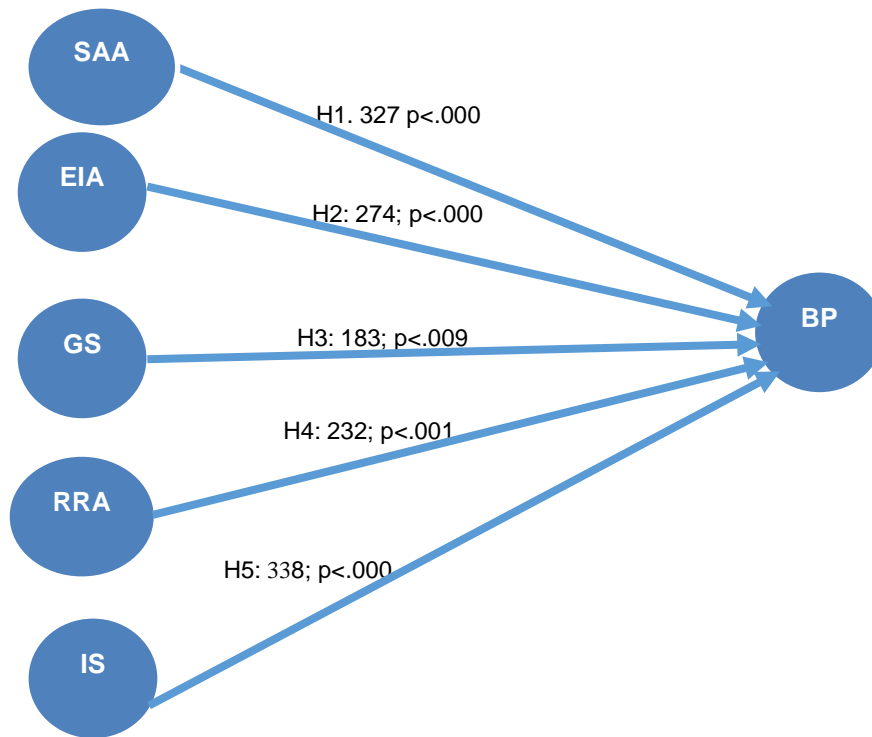
planning and budgeting. In the public sector, officials involved in both the strategic planning and budgeting processes should utilise computers and databases developed for budgeting for submission to National treasury and the Department of Public Administration to ensure effective implementation and alignment of strategic planning and the budgeting processes (Bryson & Edwards 2017:18).

In addition to correlations analysis results discussed above, the regression analysis of variables is discussed in the next section.

#### **4.7 REGRESSION ANALYSIS**

Campbell and Campbell (2008:3) consider regression analysis as a statistical technique that is used to determine the linear relationship between two or more variables. Regression analysis offers the opportunity to analyse relationships between one independent and one dependent variable and is utilised for prediction (Mooi 2014:194).

Regression analysis was conducted to establish the predictive relationship between the factors of strategic planning (strategic analysis and assessment, environmental impact assessment, goal setting, responsibilities and resource allocation and information system) and the budgeting process. Figure 4.8 is a research model that represents predictive relationships among the variables. The research model indicates the hypotheses, their pertinent beta values and significance levels. In the research model, the factors of strategic planning (strategic analysis and assessment – SAA; environmental impact assessment – EIA; goal setting – GS; responsibilities and resource allocation – RRA; and information system - IS) were inserted as independent variables and the budgeting process as the dependent variable.



**Figure 4.8: The research model**

Table 4.9 reflects the output of a predictive relationship between factors of strategic planning (SAA, EIA, GS, RRA and IS) and the budgeting process. A significant test result of  $p \geq 0.05$  means that the hypothesis is false and should be rejected, whereas the test result of  $\leq 0.05$  indicates that the hypothesis should be accepted or supported (Greenland, Senn, Rothman, Carlin, Poole, Goodman & Altman 2016:337).

The regression results of Model 1 showed that SAA predicted the occurrence of the budgeting process. The adjusted R-square of .101, which represented that SAA contributed 10 percent to the alignment of strategic planning with the budgeting process. It can be further noted from the research model that SAA had a direct effect on BP, with a beta coefficient of .327 and a significance level of  $p < .000$ . These results led to the acceptance of the hypothesis, *there is a significant positive relationship between the strategic analysis and assessment and the budgeting process* (H1). This result is supported by the study of Curristine, Lonti and Joumard (2007:33), which confirmed unequivocally that to improve institutional efficiency in the public sector, strategic planning should be used as a driver together with other result-oriented approaches like budgeting. The authors submit that these processes should be aligned to reach that goal.

**Table 4.9: Regression analysis results**

Dependent variable: Budget process					
Independent variables	Unstandardised coefficients		Standardised coefficients		
	B	Std. error	Beta	t	Sig
<b>Model 1</b>					
(Constant)	2.158	.194	.327	11.141	.000
SAA	.312	.059		4.899	.000
<b>R= .327 R Square =.107 Adjusted R Square =.101</b>					
<b>Model 2</b>					
(Constant)	2.360	.184	.274	12.829	.000
EIA	.249	.062		4.042	.000
<b>R= .274 R Square=.075 Adjusted R Square =.071</b>					
<b>Model 3</b>					
(Constant)	2.484	.231	.183	10.759	.000
GS	.160	.061		2.636	.009
<b>R= .183 R Square =.033 Adjusted R Square =.029</b>					
<b>Model 4</b>					
(Constant)	2.264	2.45	.232	9.236	.000
RRA	.222	.066		3.389	.001
<b>R= .232 R Square =.054 Adjusted R Square =.049</b>					
<b>Model 5</b>					
(Constant)	2.218	.175	.338	12.643	.000
IS	.315	.062		5.090	.000
<b>R= .338 R Square =.114 Adjusted R Square =.110</b>					

The regression results of Model 2 indicate that EIA predicted the occurrence of the budgeting process. The results indicated an adjusted R-square of .071, which reflected EIA contributed 7 percent for the incidence of budgeting process, which is clear indication that EIA was aligned to the budgeting process in selected government departments. It can be further noted from the research model that EIA had a direct effect on BP, with beta coefficient of .274  $p < .000$  (H2), hence the hypothesis, *there is a positive significant relationship between the environmental impact assessment and the budgeting process*, was supported (H2). This finding is congruent to the assertion by Partidário (2012:11-12) that for strategic planning to achieve its desired goal, its environmental impact should be assessed in line with the budget allocation to realise that planned impact. This requires the integration of an effective environmental management plan (EMP) into the organisation's overall strategic planning and implementation, including the use of impact assessment in budget allocation (Food and Agriculture Organisation of the United Nations 2012:42).

It could be observed from Table 4.9 that for Model 3 GS had a predictive relationship with the budgeting process. The results highlighted the adjusted R-square of .029 in the association, which affirmed that GS had 3 percent direct influence on the occurrence of the budgeting process. In the research model, the beta coefficient of .183 at a significance level of  $p < .009$  for the predictive relationship between GS and the budgeting process was noted; a further indication that strategic planning was aligned with the budgeting process in the selected government departments. In light of this finding, the hypothesis, *there is significant positive relationship between goal setting and the budgeting process*, was accepted (H3). The study conducted by Okpanachi and Mohammed (2013:48) confirms that some level of goal setting with clear targets in strategic planning is required to strengthen the process of budget formulation and implementation, which could improve performance and efficiency.

In Model 4, it was revealed that RRA predicted the occurrence of the budgeting process, is another finding confirming that strategic planning was indeed aligned with the budgeting process in the selected government departments. The adjusted R-squared of .049 indicated that RRA contributed 5 percent of the variation of the alignment of strategic planning with the budget process. The beta coefficient of .232, with the significance level of  $p < .001$ , further confirmed the alignment of strategic planning with budgeting, thus leading to the acceptance of the hypothesis, *there is a significant positive relationship between responsibilities and resources and the budgeting process* (H4). Ejere (2012:954) affirms that clear accountability relationship in the public sector is a vital part of the government's drive to improve service delivery. To deliver public services economically, efficiently and effectively, all stakeholders need to be clear as to who is responsible, what they are responsible for and what powers and flexibilities they have (Crous 2002:7). In its efforts to promote good governance, the South African government attaches great importance to the economy, efficiency, accountability and transparency in the management and utilisation of public resources which are encapsulated in the budget. In order to achieve these important objectives, it is vital that a coherent and consistent set of principles, rules and instructions are available to guide public officials in the discharge of their duties and responsibilities, which should fundamentally be aligned with budget allocations (Hadley, Miller & Welham 2019:33-34)

Lastly, the results in Model 5 reflected that IS had a predictive relationship with the budgeting process. The adjusted R-squared of .110 indicated that IS had an influence of 10 percent to the occurrence of the budgeting process. In this predictive relationship, a beta coefficient of .338

and a significance level of  $p < .000$  were recorded. In view of the results, the hypothesis, *there is a significant positive relationship between information system and the budgeting process*, was accepted (H5). The implication is that the strategic planning process was aligned to the budgeting process. The research conducted by Pardamean and Setyodewi (2014:13) confirms IS integrates the strategic planning process and the budgeting process since all duties, functions and authority relating to these processes are prepared and a work plan drafted through the information system. Pardamean and Setyodewi (2014:1105) support this view by asserting that the information system allows staff to carry out strategic planning and budget preparation plans by optimising the infrastructure and integrated computerised technology, as well as providing the function of control and approval. Information system also facilitates communication between work units and delivers current information.

#### **4.8 RELIABILITY AND VALIDITY**

According to Mohajan (2017:1), reliability and validity are the two most important and fundamental features in the evaluation of any measurement instrument or tool for a good research. Reliability concerns the faith that one can have in the data obtained by using an instrument, that is, the degree to which any measuring tool controls for random error. Validity concerns what an instrument measures and how well it does so.

##### **4.8.1 Reliability**

To test for internal consistency, Cronbach's alpha test was performed on the pilot study of 50 respondents and the results of the pilot study reported Cronbach's alpha coefficient of 0.93 for strategic planning and 0.85 for the budgeting process. These reliability values were considered satisfactory because they were above the threshold of 0.70.

The Cronbach alpha statistic was also undertaken to assess the internal consistency of the instrument for the main survey. Cronbach's alpha is a statistic that demonstrates that tests and scales that have been constructed or adopted for research projects are fit for purpose (Taber 2016:1). Reliability tests were conducted on Section B (strategic planning) for all 46 questionnaire items and on 12 questionnaire items of Section C (budgeting). The test provided an acceptable indication of reliability of the instrument for sections B and C. The reliability results were reported in Section 4.2 and showed acceptable alpha values of 0.83 for strategic planning and 0.845 for the budgeting process.

The reliability for the factors of strategic planning was tested and the results showed satisfactory levels of internal consistency among the factors. The alpha values for the five factors of strategic planning were: SAA - .950; EIA - .930; GS - .879; RRA - .774; IS - .707). Taber (2016:4) supports the acceptable reliability for each scale because the alpha threshold was expected to be 0.70 or above.

#### **4.8.2 Validity**

Validity is arguably the most important criterion for the quality of a test. The term validity refers to whether or not the test measures what it claims to measure (John 2015: 68-69). There were different types of validity used in this study, namely content, construct, convergent and predictive validity.

Content validity was determined by seeking advice from other academic experts in the fields of strategic planning and budgeting to confirm if the items pertaining to the constructs in the questionnaire were covered sufficiently. After consultation with the relevant experts, it turned out that the scales in the questionnaire measured strategic planning and budgeting adequately.

Construct validity was determined through EFA where low factor loadings ( $<0.50$ ) and cross loadings were deleted. The factor analysis was discussed in Section 4.4.1. Cronbach's alpha coefficient was also used to test the reliability of the extracted factors for strategic planning construct and the test results indicated that the factors were reliable.

Convergent validity was examined through the computation of Spearman correlation coefficient test. Based on the results of the analysis, convergent validity yielded comparable results to other tested instruments that measured the same constructs in the same field (Engellant, Holland & Piper 2016:39). The correlations among the constructs ranged from strong to weak and showed a significant positive correlation between the factors of strategic planning (SAA, EIA, GS, RRA and IS) and the budgeting process (refer to Section 4.6). In addition, correlation analysis was performed and the results of the analyses confirmed a significant correlation between the constructs, thus confirming the existence of convergent validity.

Finally, predictive validity was measured through regression analysis. A positive predictive relationship was prevalent between strategic planning (SAA, EIA, GS, RRA and IS) and the

budgeting process (refer to Section 4.7). The regression results indicated that factors of strategic planning contributed to the occurrence of the budgeting process, thus signifying predictive validity of the scales.

#### **4.9 CHAPTER SUMMARY**

This chapter presented key findings in respect of the alignment between strategic planning and the budgeting process. The results of the pilot study by 50 respondents were presented. The results of the main study involving 203 respondents were also presented. The results of the EFA conducted on strategic planning and the different factors extracted were discussed. Descriptive statistics used to report on the frequencies of responses and mean values to determine the level of strategic planning and budgeting process were elaborated upon.

Data relating to correlation analysis, used to establish the relationship between strategic planning and the budgeting process (SAA, EIA, GS, RRA and IS), were presented and discussed and correlations were found to be significant and positive. In a similar vein, the results of the regression analyses confirmed the predictive relationship between strategic planning and the budgeting process. Finally, the extent to which the research instrument was reliable and valid was highlighted and the results indicated that the scales for strategic planning and the budgeting process were reliable and met all the requirements of content, construct, convergent and predictive validities.

## **CHAPTER 5**

### **CONCLUSION, RECOMMENDATIONS AND LIMITATIONS**

#### **5.1 INTRODUCTION**

In the previous chapter, results of the study were presented and an interpretation of the empirical findings was made. The extraction of factors, correlations and regression analysis were undertaken. The reliability for the pilot test and main survey were established. In this chapter, the summary of the study was presented. Furthermore, this chapter highlights how the primary, theoretical and empirical objectives were achieved. This chapter provides an overview of the study and indicates the major findings from which conclusions were drawn. Finally, in this chapter, the recommendations, limitations and implications for future research were highlighted.

#### **5.2 SUMMARY OF THE RESEARCH**

In Chapter 1, the background to and the theoretical framework of the study were presented. The primary objective of the study, which was to investigate the alignment of strategic planning and budgeting processes in selected national government departments, was outlined. The problem statement was also discussed and, in addition, the hypotheses and theoretical and empirical objectives of the study were formulated. Included in this chapter was a brief discussion of the research design and the methodology used to reach empirical objectives. Furthermore, ethical principles that were complied with in conducting research were specified.

The focus in Chapter 2 was to discuss the theories underpinning the study. The chapter also focused on providing an overview of the existing literature on the notion of strategic planning and the budgeting process in the public sector. The emphasis of this chapter was to present the nature of the two processes and how they are utilised in government departments.

In Chapter 3, the research design and methodology utilised to address the research objectives of the study were outlined. The research design and the research approach deemed appropriate for this study were discussed. The pertinent research approach, which is quantitative research approach, was adopted for the study. The research methodology also focused on identifying the target population, determining the sample frame, the sampling technique and the sample



size. The data collection method and the measuring instrument were explained and the results of the pilot study were presented. Finally, the ethical considerations were addressed.

Chapter 4 presented the analysis and interpretation of the data collected from the senior managers in selected national government departments. The descriptive statistics of the sample were provided. This chapter included the results of the factor analysis, correlation analysis and regression analysis. Finally, the reliability and validity of the measuring instrument were established.

In Chapter 5, key research findings of the study are presented. The extent to which the primary, theoretical and empirical objectives were attained was highlighted. The recommendations made from the findings of the study are proposed and future research opportunities and limitations of the study are specified.

In the following section, the discussion includes how the formulated objectives of the study were achieved.

### **5.3 ACHIEVEMENT OF RESEARCH OBJECTIVES**

The main purpose of the study was to explore the extent of alignment between strategic planning and the budgeting process in selected South African national government departments. To achieve this primary objective, theoretical and empirical objectives were outlined and, in the next section, the extent to which these objectives were achieved is explained.

#### **5.3.1 Theoretical objectives**

The theoretical objectives for this study were achieved through analysis of the relevant literature. These objectives were formulated at the beginning of the study (refer to Section 1.5.2).

##### **5.3.1.1 To conduct a literature review on strategic planning**

This theoretical objective was achieved in Chapter 2, sections 2.1-2.7 of this study. The researcher made use of journal articles and textbooks in order to critically analyse the notion of strategy and strategic planning process, and the latter concept constituted of the following

components, namely the vision and mission statements, SWOT analysis, market or industry analysis, strategic analysis and choice, strategy implementation and control. The important aspect of strategic planning in the public sector was discussed to provide contextual relevance to the study. In the discussion on the strategic planning process, it was revealed that various factors, such as leadership, internal and external environment and technology trends have an enormous impact on the strategic planning process (Odera 2014:32). Kiptoo and Mwirigi (2014:193) point out that organisational culture can seriously influence the strategic planning process in an organisation if employees and management do not have a positive mindset on what the company needs to achieve. The authors further indicate that the organisational values, norms and standards of behaviour are critical for the effective implementation of the strategic planning process.

#### **5.3.1.2 To conduct a literature review on the budgeting process**

This objective was achieved in sections 2.7 to 2.8 of Chapter 2. The literature emphasised that the objective of effective budgeting is to ensure that resources are allocated efficiently between different expenditure areas in pursuit of the desired development objective and public spending within available resources (World Bank 2014:2). Various aspects of budgeting were expounded upon.

The budgeting process in the public sector was reviewed extensively to highlight that a large number of public institutions plan, collaborate, negotiate and decide together on a comprehensive government-spending plan for the next three years (RSA 2000:4). Given fiscal limits, resources must be allocated in the most effective and efficient way to meet the policy objectives of South Africa as a democratic state and as set out in the Constitution, the NDP and the MTSF: 2014 – 2019.

#### **5.3.2 Empirical objectives**

The empirical objectives for this study, which were formulated at the beginning of the study (refer to Section 1.5.3), were achieved through the statistical analysis of the data that was gleaned from respondents. The extent to which the empirical objectives were attained is explained in the following sub-section.

#### **5.3.2.1 To measure the level of implementation of strategic planning in the selected national government departments**

This objective was achieved through performing descriptive statistics using the means and standard deviations on the five critical dimensions of strategic planning in the selected national government departments. The overall mean score ( $M= 3.14$ ) of strategic planning indicated that a fair amount of respondents agreed that strategic planning was performed in the selected national government departments. The results of the mean values for SAA, EIA, GS, RRA and IS were reported in Section 4.5.1 of Chapter 4. The overall standard deviation ( $SD=0.965$ ) indicated a satisfactory distribution of sample means.

#### **5.3.2.2 To assess the level of implementation of the budgeting process in the selected national government departments**

Similarly, the means and standard deviations were used to attain this empirical objective (refer to Section 4.5.2 of Chapter 4). The results for the overall mean ( $M=3.08$ ) showed that the respondents partially agreed that the budgeting process was implemented in the selected national government departments. The data for the standard deviation ( $SD$ ) highlighted a satisfactory distribution of sample means.

#### **5.3.2.3 To examine the alignment of strategic analysis and assessment with the budgeting process**

This objective was achieved in Section 4.6 and Section 4.7 of Chapter 4. The correlation analysis signified a significant correlation between the strategic analysis and assessment and the budgeting process ( $r=.360$ ;  $p<.000$ ). The results of regression analysis ( $\beta=.360$   $p<.000$ ) showed that a predictive relationship existed between strategic analysis and assessment and budget process.

#### **5.3.2.4 To determine relationship between environmental impact assessment and the budgeting process**

The objective was achieved in sections 4.6 and 4.7 of Chapter 4. Environmental impact assessment indicated a positive significant correlation and budget process ( $r=.274$ ;  $p<.000$ ). The results of the regression analysis ( $\beta=.274$   $p<.000$ ) affirmed that EIA had a direct effect on BP.

#### **5.3.2.5 To examine the relationship between goal setting and the budgeting process**

This objective was attained in sections 4.6 and 4.7 of Chapter 4. The correlation analysis indicated a strong correlation between goal setting and the budgeting process ( $r=.247$ ;  $p<.000$ ). The regression analysis results ( $\beta= .247$   $p<.000$ ) also confirmed that a predictive relationship between goal setting and the budgeting process existed.

#### **5.3.2.6 To investigate the relationship between responsibilities and resource allocation and the budgeting process**

This objective was realised in sections 4.6 and 4.7 of Chapter 4. The correlation analysis highlighted a strong correlation between responsibilities and resource allocation and the budgeting process ( $r=.352$ ;  $p<.000$ ). The regression analysis model 3 ( $\beta= .352$   $p<.000$ ), as indicated in Section 4.7 (regression), revealed the prevalence of a predictive relationship between responsibilities, resource allocation and the budgeting process.

#### **5.3.2.7 To establish if responsibilities and resource allocation affects budget process**

Finally, this objective was achieved in Section 4.6 (correlations) and Section 4.7 (regression) of Chapter 4. The correlation analysis results showed that there was a very weak correlation between responsibilities, resource allocation and the budgeting process ( $r=.441$ ;  $p<.000$ ). The results of the regression analysis ( $r=.419$ ;  $p<.000$ ) showed that responsibility and resource allocation played a pivotal role in the implementation of the budgeting process ( $\beta=.131$   $p<.000$ ).

The key research findings are outlined in the next section.

### **5.4 KEY RESEARCH FINDINGS**

The following research findings were observed in the study:

- Both strategic planning and budgeting processes were implemented in the selected national government departments
- Strategic analysis and assessment were positively related to the budgeting process

- Environmental impact assessment had a significant positive relationship with the budgeting process
- Goal setting related positively with the budgeting process
- A significant positive relationship between responsibilities, resource allocation and the budgeting process existed.
- Information system showed a positive significant relationship with the budgeting process
- In general, the strategic planning process was aligned to the budgeting process in the selected government departments.

## **5.5 RECOMMENDATIONS**

In light of the key research findings the following recommendations were made:

- The overall mean score of strategic planning was recorded at  $M=3.14$ , which obviously requires improvement. The improvement effort could involve extensive training and development on the process of strategic planning in all its facets, namely planning, implementation and evaluation or control. Training and development will instil the necessary skills or competencies required for performing the strategic planning process. Knowledge and mastery acquired in this field will imbue senior managers with confidence to plan, implement, evaluate the strategic process and tackle challenges arising from such an engagement. Arrangement of conferences, seminars and workshops are an absolute necessity to leverage the skill level of senior managers in respect of strategic planning.
- With respect to the budgeting process, this study established that the overall mean score for the budgeting process was slightly above three ( $M=3.08$ ), which also demonstrated that there was a need for ameliorating the planning, implementation and evaluation of budgeting activities. Similar efforts like those efforts in the improvement of the planning, implementation and evaluation of strategic process should be executed for the budgeting process if the meaningful and cohesive implementation of the budgeting process is to be realised. Seminars and workshops on budgeting should be organised on a regular basis.
- With respect to SAA, this study established that the overall mean score for SAA was  $M=2.97$ , which demonstrated that this strategic activity needs improvement. It is recommended that all critical stakeholders in government departments should be involved

in the strategic analysis and assessment activity in order to draw as much meaningful, relevant and detailed information about the internal and external environment. The strategic analysis assessment activity should not be limited to managers. The required level of participation and participants could be elucidated in policies, circulars and notices. All forms of communication should be used to convey the message across government departments about the importance of strategic analysis assessment.

- The mean score of 2.91 (M=2.91) for EIA also indicated the need for improvement in this area. Impact assessment could also be an activity that involves all critical stakeholders that are likely to be impacted by the implementation of the strategy. To draw necessary and relevant information, the Delphi technique could be applied, which will ensure that all identified stakeholders provide meaningful feedback.
- The findings of this study highlighted the mean score of GS to be M=3.55, which also showed the need for improvement. In light of this, it is recommended that strategic objectives should be set out and communicated effectively to all employees in government departments. Not more than five strategic objectives should be developed, as it was cited in Chapter 2 that more than five strategic objectives cause distraction. Over and above this, the SMART principle should be followed in developing strategic objectives to allow for the evaluation of the extent to which they have been achieved. The plan to achieve these objectives should be adequately mapped out.
- The level M=2.60 of IS requires improvement for effective strategic planning. Fostering active involvement in strategic planning creates an opportunity for IT departments to evaluate how the IT infrastructure should be installed to support the implementation of strategic planning. The IT department should take part in the strategic planning process from beginning to end of the strategic planning process. Meeting minutes should be recorded, with special attention to the role and input of the IT department. The IT role and input could be a standing item on the agenda in all strategic planning meetings.

## **5.6 LIMITATIONS OF THE STUDY**

This study, like all other studies, has several limitations, one of which is the use of a non-probability convenience sampling technique in the selection of sampled elements. The use of

this technique creates a situation where the findings from this study cannot be generalised to other senior managers in national government departments that were not selected.

Furthermore, data were collected by means of a self-administered method of survey. This meant that the researcher did not have control over how senior managers completed the questionnaires. Emotions and attitudes of senior managers during the administration of the survey could have marred the responses with bias.

Of the 300 structured questionnaires issued, only 203 were completed and returned by respondents; thus, limiting the size of the sample. A larger sample size may have produced a different and better picture of the research results.

The following section highlights the research opportunities that may be explored.

## **5.7 FUTURE RESEARCH OPPORTUNITIES**

This study generated a significant amount of knowledge regarding the alignment of strategic planning and budgeting in the selected national government departments' processes and practices. Further studies could use probability sampling to allow generalisation of findings to all national government departments. A study of a similar nature could be conducted in provincial departments or metropolitan municipalities.

A comparative study, with regards to the alignment of the strategic planning and the budgeting processes, could be undertaken to identify similarities and differences between national government departments. This scope could be extended to departments in other provinces or municipalities.

In this study, a quantitative research method was utilised. To improve the richness and completeness of results or information, qualitative methods could be used to supplement the quantitative approach to gather data.

Other studies could investigate the mediating role of other factors in the alignment of strategic planning and the budgeting process. These other factors could include decision making and delegation.

Lastly, the current study was a snapshot study conducted at a particular point in time, which could be complemented by a longitudinal study aimed at identifying emerging trends from the alignment of strategic planning and the budgeting processes.

## **5.8 CHAPTER SUMMARY**

This study focused on the investigation of strategic planning and its alignment with the budgeting process in the selected national government departments. The extent to which the theoretical and empirical objectives formulated were achieved was explained in detail. Key research findings were outlined, which led to proposing several recommendations. Limitations of the study were outlined and future research opportunities were highlighted.



## REFERENCES

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- 2GC LIMITED. 2009. What is Strategic Control? [Online]. Available at: <<https://2gc.eu/resources/faqs/what-is-strategic-control>>. Accessed: 15/04/2020.
- ABOGUN, S. & FAGBEMI, T.O. 2012. The efficacy of budgeting as control measure in developing economies: a study from Nigeria. *Asian Social Science*, 8(1):176-182.
- ADAMS, J., KHAN, H.T.A. & RAESIDE, R. 2014. *Research methods for business and social science students*. 2nd ed. London: Sage.
- ADWOK, J. 2015. Probability sampling - a guideline for quantitative health care research. *The Annals of African Surgery*, 12(2):95-99.
- AGSA 2013. Our vision. [Online]. Available at: <<https://www.agsa.co.za/AboutUs.aspx>>. Accessed: 13/05/2020.
- AKARANGA, S.I. & MAKAU, B.K. 2016. Ethical considerations and their applications to research: a case of the University of Nairobi. *Journal of Educational Policy & Entrepreneurial Research*, 3(12):1-9.
- AKARANGA, S.I. & ONGONG'A, J. 2013. Work ethics for university lecturers: an example of Nairobi and Kenyatta Universities. *International Journal of Arts & Commerce*, 2(8):8-22.
- AKHTAR, M.I. & ISLAMIA, J.M. 2016. Research design. *Research in Social Science: Interdisciplinary Perspectives*, 68-84.
- AL-HAWARY, S.I.S. & AL-HAMWAM, A.M. 2017. Environmental analysis and its impact on the competitive capabilities of the commercial banks operating in Jordan. *International Journal of Academic Research in Accounting, Finance & Management Sciences*, 7(1):277-290.

ALMALKI, S.2016. Integrating quantitative and qualitative data in mixed methods research - challenges and benefits. *Journal of Education & Learning*, 5(3):288-296.

ALTMAN, D.G. & BLAND, J.M. 2005. Statistics notes - standard deviations and standard errors. *British Medical Journal*, 331(7521):903-903.

AMIT, R. & SCHOEMAKER, P. 2016. Firm resources. In Augler, M. & Teece, D., ed. *The Palgrave Encyclopaedia of Strategic Management*. London: Palgrave. Pp. 1-5.

AMUENJE, F. 2009. *The alignment of strategic planning and budgeting planning and the impact on shareholders' value: the experience of FNB Namibia Holdings Limited*. MBA. Mini thesis. University of Stellenbosch.

ANDALE. 2014. Inferential statistics: definition, uses. [Online]. Available at: <[https://online225.psych.wisc.edu/wp-content/uploads/225-Master/225-UnitPages/Unit-07/StatisticsHowTo\\_Inferential\\_2014.pdf](https://online225.psych.wisc.edu/wp-content/uploads/225-Master/225-UnitPages/Unit-07/StatisticsHowTo_Inferential_2014.pdf)>. Accessed: 15/03/2020.

ANDREW, D.P.S., MCEVOY, C.D. & PEDERSON, P.M.2011. *Research methods and design in sport management*. New York: Human Kinetics.

BABATUNDE, B.O. & ADEBISI, A.O. 2012. Strategic environmental scanning and organisation performance in a competitive business environment. *Economic Insights – Trends & Challenges*, 65(1):24-34.

BABBIE, E. & MOUTON, J. 2001. *The practice of social research*. Cape Town: Oxford.

BABBIE, E. & MOUTON, J. 2010. *The practice of social research*. 10th ed. Cape Town: Oxford.

BABBIE, E.R. 2013. *The practice of social research*. 13th ed. California: Wadsworth.

BABBIE, E.R. 2014. *The basics of social research*. 6th ed. California: Wadsworth.

BAIN, J. S.1957. Barriers to new competition. *The Yale Law Journal*, 66(4):634-636.

- BAJPAI, S. & BAJPAI, R. 2013. Goodness of measurement: reliability and validity. *International Journal of Medical Science & Public Health*, 3(2):112-115.
- BALASUNDARAM, A. 2009. Factor analysis: nature, mechanism and uses in social and management researches. *Journal of Cost & Management Accountant*, 47(2):15-25.
- BANUMATHI, M. & SAMUDHARAJAKUMAR, C. 2015. The role of middle level managers and corporate entrepreneurship. *International Journal of Arts, Humanities & Management Studies*, 1(9):21-26.
- BARNEY, J.B. & HESTERLY, W.S. 2008. *Strategic management and competitive advantage: concepts and cases*. 2nd ed. New Jersey: Pearson.
- BAROTO, M.B., ARVAND, N. & AHMAD, F. 2014. Effective strategy implementation. *Journal of Advanced Management Science*, 2(1):50-54.
- BARWISE, P., MARSH, P.R. & WENSLEY, R. 1989. Must finance and strategy clash? [Online]. Available at: <<https://hbr.org/1989/09/must-finance-and-strategy-clash>>. Accessed: 03/05/2020.
- BERNDT, A. & PETZER, D. 2011. *Marketing research*. Cape Town: Pearson.
- BIRD D. K. 2009. The use of questionnaires for acquiring information on public perception of natural hazards and risk mitigation - a review of current knowledge and practice. *Natural Hazards & Earth System Sciences*, 9(4):1307-1325.
- BISASE, M.T. 2017. The role of parliamentary budget office (PBO) in the budget cycle and fiscal oversight function of parliament (Ugandan Experience). [Online]. Available at: <[https://www.parliament.gov.za/storage/app/media/PBO/conf2017/presentation/Role\\_of\\_PB\\_O\\_in\\_the\\_Budget\\_Cycle\\_Uganda\\_ANPBO\\_Aug2017.PDF](https://www.parliament.gov.za/storage/app/media/PBO/conf2017/presentation/Role_of_PB_O_in_the_Budget_Cycle_Uganda_ANPBO_Aug2017.PDF)>. Accessed: 20/01/2020.
- BLANCHE, M.T., DURRHEIM, K. & PAINTER, D. 2006. *Research in practice: applied methods for the social sciences*. Cape Town: UCT.

BLANKSON, C. 2005. Environmental analysis. [Online]. Available at: [<http://www.systemico.ca/strategic-planning/environmental-analysis/>](http://www.systemico.ca/strategic-planning/environmental-analysis/). Accessed: 15/05/2020.

BLESS, C., HIGSON-SMITH, C. & KAGEE, A. 2006. *Fundamental in social research methods: an African perspective*. 4th ed. Cape Town: Juta.

BLESS, C., HIGSON-SMITH, C. & SITHOLE, S.L. 2013. *Fundamentals of social research methods: an African perspective*. Cape Town: Juta.

BLUMAN, A.G. 2013. *Elementary statistics: a step by step approach*. 7th ed. New York: McGraw-Hill.

BOGDAN, R. C. & BIKLEN, S. K. 2003. *Qualitative research of education: an introductive to theories and methods*. 4th ed. Boston: Allyn and Bacon.

BOND, T.G. 2003. Validity and assessment: a rasch measurement perspective. *Metodologia de las Ciencias del Comportamiento*, 5(2):179-194.

BONETT, D.G. 2014. Cronbach's alpha reliability: interval estimation, hypothesis testing, and sample size planning. *Journal of Organisational Behaviour*, 36(1):1-14.

BORA, B., BORAH, S. & CHUNGYALPA, W. 2017. Crafting strategic objectives: examining the role of business vision and mission statements. *Journal of Entrepreneurship & Organisation Management*, 6(1):1-6.

BOYLE, G.J. 1991. Does item homogeneity indicate internal consistency or item redundancy in psychometric scales? *Personality & Individual Differences*, 12(3):291-294.

BRAEKEN, J. & VAN ASSEN, M. A. L. M. 2016. An empirical Kaiser criterion. *Psychological Methods*, 22(3):450-466.

BRANDENBURGER, A.M. & NALEBUFF, B.J. 1996. *Co-opetition: a revolution mindset that combines competition and cooperation*. New York: Crown.

BRINK, H.I. 2006. *Fundamentals of research methodology for health care professionals*. 2nd ed. Cape Town: Juta.

BRINKSCHRÖDER, N. 2014. Strategy implementation: key factors, challenges and solutions. Paper read at the 4th IBA Bachelor Thesis Conference held in Enschede, November 6, 2014. Netherland, pp. 1-9.

BRITS, J.H. 2010. A model for the integration of quality management, planning and resource allocation at South African universities. PhD. Thesis. Vanderbijlpark: North-West University.

BROWN, G.W. 2009. Value chains, value streams, value nets & value delivery chains. [Online]. Available at: < <https://www.bptrends.com/publicationfiles/FOUR%2004-009-ART-Value%20Chains-Brown.pdf>>. Accessed: 16/03/2020.

BROWN, J.D. 2002. The Cronbach alpha reliability estimate. *Shiken: JALT Testing & Evaluation SIG Newsletter*, 6 (1):17-18.

BRYMAN, A. 2012. *Social research methods*. 4th ed. New York: Oxford.

BRYSON, J. & EDWARDS, L.H. 2017. Strategic planning in the public sector. In Aldag, R., ed. *Oxford Research Encyclopaedia of Business & Management*. New York: Oxford. Pp. 1-27.

BRYSON, J. M. 2010. The future of public and non-profit strategic planning in the United States. *Public Administration Review*, 70(1):255-267.

BULLARD, F. 2006. Introduction to statistical inference. [Online]. Available at: <[https://projects.ncsu.edu/crsc//events/ugw06/presentations/fbullard/inference\\_talk.pdf](https://projects.ncsu.edu/crsc//events/ugw06/presentations/fbullard/inference_talk.pdf)>. Accessed:12/03/2020.

BURNS, N. & GROVE, S.K. 2001. *The practice of nursing research: conduct, critique and utilisation*. 4th ed. Missouri: Elsevier.

CAMPBELL, D. & CAMPBELL, S. 2008. Introduction to regression and data analysis. [Online]. Available at: <<https://statlab.stat.yale.edu/workshops/IntroRegression/statLab-IntroRegressionFa08.pdf>>. Accessed: 20/03/2020.

CARLSON, K.D. & HERDMAN, A.O. 2012. Understanding the impact of convergent validity on research results. *Organisational Research Methods*, 15(1):17-32.

CARRIBEAN CENTRE FOR DEVELOPMENT ADMINISTRATION. 2003. Strategic planning in public services. [Online]. Available at: <<https://caricom.org/documents-and-publications/>>. Accessed: 20/04/2020.

CENTRE FOR BUSINESS DEVELOPMENT. 2001. Driving value through strategic planning and budgeting: a research report from Cranfield School of Management and Accenture. [Online]. Available at: <<https://authorzilla.com/Xqllq/driving-value-through-strategic-planning-and-budgeting-cranfield.html>>. Accessed: 18/04/2020.

ČERNIAUSKIENĖ, N. 2014. Strategic management of public sector institutions. [Online]. Available at: <[http://www.esparama.lt/es\\_parama\\_pletra/failai/ESFproduktai/2014\\_Strategic\\_Management\\_of\\_Public\\_Sector\\_Institutions.pdf.pdf](http://www.esparama.lt/es_parama_pletra/failai/ESFproduktai/2014_Strategic_Management_of_Public_Sector_Institutions.pdf.pdf)>. Accessed: 10/03/2020.

CHARMAZ, K. 2006. *Constructing grounded theory: a practical guide through qualitative analysis*. London: Sage.

CHECK, J. & SCHUTT, R.K. 2012. *Research methods in education*. London: Sage.

CHEN, K., GUO, W. & LI, H. 2008. The implementation of strategy evaluation model and index system construction. *International Journal of Business & Management*, 3(9):121-124.

CHEN, Z. 2008. Defining buyer power. *The Antitrust Bulletin*, 53(2):241-249.

CRESWELL, J.W. 2007. *Qualitative inquiry & research design: choosing among five approaches*. 2nd ed. London: Sage.

CRESWELL, J.W. 2014. *Research design: qualitative, quantitative and mixed methods approaches*. 4th ed. London: Sage.

CROUS, M. 2002. Service delivery in the South African public service: implementation of the Batho Pele principles by Statistics South Africa. *Journal of Administration*, 39(4):574-589.

CUELLAR-HEALEY, S. & GOMEZ, M. 2013. Marketing module 4: competitor analysis. [Online]. Available at: <  
<http://publications.dyson.cornell.edu/outreach/extensionpdf/2013/Cornell-Dyson-eb1305.pdf>>. Accessed: 08/04/2020.

CURRISTINE, T., LONTI, Z. & JOUMARD, I. 2007. Improving public sector efficiency: challenges and opportunities. *OECD Journal on Budgeting*, 7(1):1-41.

CURTIS, B. & CURTIS, C. 2011. *Social research: a practical introduction*. London: Sage.

CUTHBERTSON. 2012. Defining project goals and objectives. [Online]. Available at: <  
[http://www.dst.uniroma1.it/sites/default/files/allegati/SITE\\_Goals-Objectives.pdf](http://www.dst.uniroma1.it/sites/default/files/allegati/SITE_Goals-Objectives.pdf)>. Accessed: 22/01/2020.

DARBI, W.P.K. 2012. Of mission and vision statements and their potential impact on employee behaviour and attitudes: the case of a public but profit-oriented tertiary institution. *International Journal of Business & Social Science*, 3(14):95-109.

DEVLIN, A.S. 2006. *Research methods: planning, conducting and presenting research*. California: Wadsworth.

DIAMOND, J. & KHEMANI, P. 2006. Introducing financial management information systems in developing countries. *OECD Journal on Budgeting*, 5(3):97-132.

- DJORDJEVIĆ, B. 2014. Strategy analysis and choice. *MEST Journal*, 2(2):42-50.
- DOBSON, P., CLARKE, R., DAVIES, S. & WATERSON, M. 2000. Buyer power and its impact on competition in the food retail distribution sector of the European union. *Journal of Industry Competition & Trade*, 1(3):1-41.
- DOODY, O. & DOODY, C.M. 2015. Conducting a pilot study: case study of a novice researcher. *British Journal of Nursing*, 24(21):1074-1078.
- DOWNEY, J. 2007. Strategic analysis tools. *The Chartered Institute of Management Accountants*, 34(1):3-15.
- DUBE, S. 2011. Supplemental guidance: public sector definition. [Online]. Available at: <<https://global.theiia.org/standardsguidance/Public%20Documents/Public%20Sector%20Definition.pdf>>. Accessed: 15/02/2020.
- EJERE, E.E.I. 2019. Promoting accountability in public sector management in today's democratic Nigeria. *Book of Proceedings – Tourism & Management Studies International Conference Algarve*, 3:953-964.
- ELST, H. 2013. Foundations of descriptive and inferential statistics. [Online]. Available at: <<https://arxiv.org/pdf/1302.2525.pdf>>. Accessed: 14/03/2020.
- ENGELLANT, K.A., HOLLAND, D.D. & PIPER, R.T. 2016. Assessing convergent and discriminant validity of the motivation construct for the technology integration education (TIE) model. *Journal of Higher Education Theory & Practice*, 16(1):37-50.
- ESCAP. 2010. Guidelines for cognitive and pilot testing of questions for use in surveys: ESCAP project on improving disability measurement and statistics in Asia pacific region. [Online]. Available at: <<https://www.unescap.org/sites/default/files/Disability-question-testing-guidelines.pdf>>. Accessed: 13/02/2020.
- ETIKAN, I. & BALA, K. 2017. Sampling and sampling methods. *Biometrics & Biostatistics International Journal*, 5(6):215-217.



ETIKAN, I., MUSA, S.A. & ALKASSIM, R.S. 2016. Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical & Applied Statistics*; 5(1):1-4. *Evidence Based Nursing*, 18, (2):34-35.

FAURE, B. & ROULEAU, L. 2011. The strategic competence of accountants and middle managers in budget making. *Accounting Organisations & Society*, 36(3):167-182.

FEDOR-FREYBERGH, P.G. & MIKULECKÝ, M. 2005. From the descriptive towards inferential statistics: hundred years since conception of the student's t-distribution. *Neuroendocrinology letters*, 3(26):167-172.

FIELD, A. 2000. *Discovering statistics using SPSS for Windows: advanced techniques for the beginners*. London: Sage.

FINK, A. 2010. *Conducting research literature reviews: from the Internet to paper*. 3rd ed. London: Sage.

FOOD AND AGRICULTURE ORGANISATION OF THE UNITED NATIONS. 2012. [Online]. Available at: < <http://www.fao.org/news/archive/news-by-date/2012/en/>>. Accessed: 10/02/2020.

FOUKA, G. & MANTZOROU, M. 2011. What are the major ethical issues in conducting research? Is there a conflict between the research ethics and the nature of nursing? *Health Science Journal*, 5(1):3-14.

FOX, N., HUNN, A. & MATHERS, N. F. 2009. Sampling and sample size calculation. [Online]. Available at: <[file:///C:/Users/Jumi/Downloads/Sampling\\_and\\_Sample\\_Size\\_Calculation\\_The.pdf](file:///C:/Users/Jumi/Downloads/Sampling_and_Sample_Size_Calculation_The.pdf)>. Accessed: 12/03/2020.

FOZZARD, A. 2001. The basic budgeting problem: approaches to resource allocation in the public sector and their implications for pro-poor budgeting. [Online]. Available at: <<https://www.files.ethz.ch/isn/100340/wp147.pdf>>. Accessed: 17/04/2020.

FRASER, J., FAHLMAN, D.W., ARSCOTT, J. & GUILLOT, I. 2018. Pilot testing for feasibility in a study of student retention and attrition in online undergraduate programs. *The International Review of Research in Open & Distributed Learning*, 19(1):260-278.

FRERICHS, R.R. 2008. Simple Random Sampling. [Online]. Available at: <[http://www.ph.ucla.edu/epi/rapidsurveys/RScourse/RSbook\\_ch3.pdf](http://www.ph.ucla.edu/epi/rapidsurveys/RScourse/RSbook_ch3.pdf)>. Accessed: 15/03/2020.

GALLAGHER, S. 2013. Corporate Strategy: why does firm performance differ? [Online]. Available at: <<http://educ.jmu.edu/~gallagsr/WDFPD-Corporate.pdf>>. Accessed: 12/03/2020.

GATES, L.P. 2010. Strategic planning with critical success factors and future scenarios: an integrated strategic planning framework. [Online]. Available at: <[https://resources.sei.cmu.edu/asset\\_files/TechnicalReport/2010\\_005\\_001\\_15296.pdf](https://resources.sei.cmu.edu/asset_files/TechnicalReport/2010_005_001_15296.pdf)>. Accessed: 12/04/2020.

GILL, P.W, STEWART, K.F, TREASURE, E. & CHADWICK, B. 2008. Methods of data collection in qualitative research: interviews and focus groups. *British Dental Journal*, 204(6):291-295.

GOGTAY, N. J. & THATTE, U. M. 2017. Principles of correlation analysis. *The Journal of the Association of Physicians of India*, 65(2):78-81.

GOMEZ, P., FRIEDMAN, J. & SHAPIRO, I. 2006. Opening budgets to public understanding and debate: results from 36 Countries. *OECD Journal on Budgeting*, 5(1):7-36.

GOODWYN, F. 2012. Question number two: how many factors? [Online]. Available at: <<https://files.eric.ed.gov/fulltext/ED529100.pdf>>. Accessed: 13/04/2020.

GORSUCH, R.L. 2015. *Factor analysis*. 2nd ed. New Jersey: Lawrence Erlbaum.

GRAHAM, A. 2011. Public sector financial management for managers. [Online]. Available at: <<https://www.coursehero.com/file/41197617/Public-Sector-Financial-Management-for-Managers-1pdf/>>. Accessed: 15/03/2020.

GRANT, R.M. 2016. *Contemporary strategy analysis: text and cases edition*. 9th ed. New York: Wiley.

GREENLAND, S., SENN, S.J., ROTHMAN, K.J., CARLIN, J.B., POOLE, C., GOODMAN, S.N. & ALTMAN, D.G. 2016. Statistical tests, p-values, confidence intervals, and power: a guide to misinterpretations. *European Journal of Epidemiology*, 31(4):337–350.

GRUNDY, T. 2006. Rethinking and reinventing Michael Porter's five forces model. *Strategic Change*, 15(5):213-229.

GUPTA, A. 2013. Environmental & pest analysis: an approach to external business environment. *International Journal of Modern Social Sciences*, 2(1):34-43.

GUPTA, S L. 2004. *Marketing research*. Liverpool: Excel Books.

GUREL, E. 2017. SWOT analysis: a theoretical review. *The Journal of International Social Research*, 10 (51): 994-1006.

HADI, N.U., ABDULLAH, N. & SENTOSA, I. 2016. An easy approach to exploratory factor analysis: marketing perspective. *Journal of Educational & Social Research*, 6(1):215-223.

HADLEY, S., MILLER, M. & WELHAM, B. 2019. The role of the budget officer in controlling public spending. [Online]. Available at: <<https://www.odi.org/sites/odi.org.uk/files/resource-documents/12693.pdf>>. Accessed: 13/05/2020.

HAIR, J.F., WOLFINBARGER, M.F., ORTINAU, D.J. & BUSH, R.P. 2008. *Essentials of marketing research*. 2nd ed. New York: Mc Graw-Hill.

HAITHAM, J. 2017. Influence of managerial connectivity on strategic choice: the role of middle managers. PhD. Thesis. University of Glasgow.

HARRIS, T. 2007. Why you need to use statistics in your research. [Online]. Available at: <[https://www.briarcliffschools.org/uploaded/HS\\_files/BHS\\_Research/Why\\_You\\_Need\\_to\\_Use\\_Statistics\\_in\\_Your\\_Research.pdf](https://www.briarcliffschools.org/uploaded/HS_files/BHS_Research/Why_You_Need_to_Use_Statistics_in_Your_Research.pdf)>. Accessed: 13/02/2020.

HASSAN, N.A. 2014. *Research methodology - research design*. [Online]. Available at: <<http://engineering.utm.my/civil/postgraduate-office/wp-content/uploads/sites/41/2014/03/research-design-mac-2014.pdf>>. Accessed: 13/03/2020.

HASSAN, Z.A, SCHATTNER, P. & MAZZA, D. 2006. Doing a pilot study: why is it essential? *Malaysian Family Physician*, 1(2-3):70-73.

HEALE, R. & TWYCROSS, A. 2015. Validity and reliability in quantitative studies. *Evidence Based Nursing*, 18(3):66-67.

HESLIN, P.A., CARSON, J.B. & VANDEWALLE, D. 2016. Practical applications of goal-setting theory to performance management. [Online]. Available at: <<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.918.7124&rep=rep1&type=pdf>>. Accessed: 13/04/2020.

HILL, C.W.L., JONES, G.R. & SCHILLING, M.A. 2015. *Strategic management theory*. 11th ed. Connecticut: Cengage.

HILLMAN, A.J., WITHERS, M.C. & COLLINS, B.J. 2009. Resource dependence theory: A review. *Journal of Management*, 35(6): 1404: 1427.

HOPE, J. & FRASER, R. 2001. Beyond budgeting questions and answers. [Online]. Available at: <<http://www.balanced-scorecard.de/docs/Beyondbudgeting3.pdf>>. Accessed: 25/03/2020.

HOURLANI, M. 2017. Conceptual frameworks for strategic implementation: a literature review. *Journal of Management Research*, 9(3):12-30.

HU, Q., KAPUCU, N. & O'BYRNE, L. 2014. Strategic planning for community-based small non-profit organizations: implementation, benefits and challenges. *Journal of Applied Management & Entrepreneurship*, 19(1): 83-101.

HUANG, W. 2019. Developing a better planning, budgeting, and accounting system. [Online]. Available at: <<https://link.springer.com/content/pdf/10.1007%2F978-981-13-7507-1.pdf>>. Accessed: 10/04/2020.

HUSSAIN, W. 2012. Is ethical consumerism an impermissible form of vigilantism? *Philosophy & Public Affairs*, 40(2):1-47.

IBM. 2009. Best-practice budgeting. [Online]. Available at: <[ftp://public.dhe.ibm.com/software/data/swlibrary/cognos/uk/pdfs/wp\\_best\\_practice\\_budgeting.pdf](ftp://public.dhe.ibm.com/software/data/swlibrary/cognos/uk/pdfs/wp_best_practice_budgeting.pdf)>. Accessed: 05/04/2020.

IKAVALKO, H. 2005. Strategic process in practice: practices and logics of action of middle managers in strategy implementation. PhD. Dissertation. Helsinki University of Technology. Espoo.

INDIATSY, C.M., MWANGI, M.S., MANDERE, E.N., BICHANGA, J.M. & GEORGE, G.E. 2014. The application of Porter's five forces model on organisation performance: a case of cooperative bank of Kenya Ltd. *European Journal of Business & Management*, 6(16):75-86.

INDRIS, S. & PRIMIANA, I. 2015. Internal and external environment analysis on the performance of small and medium industries (SMES) in Indonesia. *International Journal of Scientific & Technology Research*, 4(4):188-196.

IPARRAGUIRRE, J.L. 2010. Introductory Module to Economics of Ageing: gentle introduction to how to use economics to influence public policy. [Online]. Available at: <<https://www.cardi.ie/userfiles/Public%20Policy.pdf>>. Accessed: 13/03/2020.

ISAKSEN, J. 2005. The budget process and corruption. [Online]. Available at: <<https://www.cmi.no/publications/file/2559-the-budget-process-and-corruption.pdf>>. Accessed: 12/03/2020.

JABBAR, A.A. & HUSSEIN, A.M. 2017. The role of leadership in strategic management. *International Journal of Research - Granthaalayah*, 5(5):99-106.

JACKSON, S., SAWYERS, R. & JENKINS, G. 2008. *Managerial Accounting: a focus on ethical decision making*. 5th ed. Ohio: Cengage.

JAGGI, S. 2011. Descriptive statistics and exploratory data analysis. [Online]. Available at: <<https://pdf4pro.com/view/descriptive-statistics-and-exploratory-48573.html>>. Accessed: 25/05/2020.

JENKINS, M., AMBROSINI, V. & COLLIER, N. 2016. *Advanced strategic management*. 3rd ed. London: Red globe.

JESSON, J.K., LAZEY, F.M. & MATHESON, L. 2011. *Doing your literature review, traditional and systematic techniques*. London: Sage.

JOFRE, S. (2011). Strategic Management: the theory and practice of strategy in (business) organisations. [Online]. Available at: <<file:///C:/Users/TM/Downloads/rapport1.11.pdf>>. Accessed; 15/04/2020.

JOHN, A.C. 2015. Reliability and validity: A sine qua non for fair assessment of undergraduate technical and vocational education projects in Nigerian Universities. *Journal of Education & Practice*, 6(34):68-75.

KAISER, U. 2009. A primer in entrepreneurship. [Online]. Available at: <<https://www.uzh.ch/cmsssl/dam/jcr:00000000-0b5d-98e0-ffff-ffffc80668d3/Kap11primerentrepreneur09.pdf>>. Accessed: 18/04/2020.

KALITA, D.J. 2016. Environmental impact assessment (EIA) in India: an appraisal. *Dimorian Review*, 3(1):50-54.

KAMARIOTOU, M. & KITSIOS, F. 2018. Strategic information systems planning *In* Mehdi Khosrow-Pour (Ed.), *Encyclopaedia of Information Science & Technology*, 4th ed. Pennsylvania: IGI.

KAPLAN, R.S. & NORTON, D. P. 2006. *Alignment: using the balanced scorecard to create corporate synergies*. Boston: Harvard Business School.

KAY, N. 2014. Competitive strategy. [Online]. Available at: <https://www.ebsglobal.net/EBS/media/EBS/PDFs/Competitive-Strategy-Course-Taster.pdf>. Accessed: 15/03/2020.

KAZMI, A. 2006. *Business policy and strategic management*. 2nd ed. New Delhi: McGraw-Hill.

KIM, Y.H., STING, F.J. & LOCH, C.H. 2014. Top-down, bottom-up, or both? Toward an integrative perspective on operations strategy formation. *Journal of Operations Management*, 1-43.

KIPTOO, J.K. & MWIRIGI, F.M. 2014. Factors that influence effective strategic planning process in organisations. *IOSR Journal of Business & Management*, 16(6):188-195.

KLEIN, L.L. & PEREIRA, B.A.D. 2016. The survival of interorganisational networks: a proposal based on resource dependence theory. *Revista de Administracao Mackenzie*, 17(4):153-175.

KOLIOS, A. & READ, G. 2013. A political, economic, social, technology, legal and environmental (PESTLE) approach for risk identification of the tidal industry in the United Kingdom. *Energies*, 6(10):5023-5045.

KOMOROWSKI, M & SALCICCIOLI, J.D. 2016. Exploratory data analysis. Available at: <https://www.researchgate.net/publication/308007227>. Accessed: 12/04/2020.

KOTHARI, C.R. 2004. *Research methodology: methods and techniques*. 2nd ed. Las Vegas: New Age.

KOUMPAROULIS, D.N. 2013. PEST Analysis: the case of E-shop. *International Journal of Economy, Management & Social Sciences*, 2(2):31-36.

KPMG & ACCA. 2015. Planning, budgeting and forecasting: an eye on the future. [Online]. Available at: <<https://home.kpmg/content/dam/kpmg/pdf/2015/08/an-eye-on-the-future-kpmg-acca-report.pdf>>. Accessed: 23/03/2020.

KRAJA, Y.B. & OSMANI, E. 2015. Importance of external and internal environment in creation of competitive advantage to SMES. (Case of SMES, in the northern region of Albania). *European Scientific Journal*, 11(13):120-130.

KRASKA-MILLER, M. 2014. *Nonparametric statistics for social and behavioural sciences*. New Wales: CRC.

KROON, J. 1996. *General Management*. Pretoria: Kagiso.

KUMAR, R. 2011. *Research methodology: a step-by-step guide for beginners*. 3rd ed. London: Sage.

KUMAR, R. 2014. *Research methodology: a step-by-step guide for beginners*. 4th ed. London: Sage.

KUMAR, S. & CHONG, I. 2018. Correlation analysis to identify the effective data in machine learning: prediction of depressive disorder and emotion states. *International Journal of Environmental Research & Public Health*, 15(2907):1-24.

LANZKRON, R. 2017. Best practice in the budget and planning process. [Online]. Available at: <[https://www.pwc.com/il/he/events/assets/2017/15-6/best\\_practice\\_in\\_the\\_budget\\_and\\_planning\\_process.pdf](https://www.pwc.com/il/he/events/assets/2017/15-6/best_practice_in_the_budget_and_planning_process.pdf)>. Accessed:15/04/2020.



- LATHAM, G.P. 2007. *Work motivation: history, theory, research, and practice*. 2nd ed. London: Sage.
- LAVARDA, R.A.B., CANET-GINER, M.T. & PERIS-BONET, F.J. 2010. How middle managers contribute to strategy formation process: connection of strategy processes and strategy practices. *Revista de Administracao de Empresas*, 50(4):358-370.
- LAZENBY, K. 2014. *The strategic management process: a South African perspective*. Pretoria: Van Schaik.
- LEE, D. K., IN, J. & LEE, S. 2015. Standard deviation and standard error of the mean. *Korean Journal of Anaesthesiology*, 68(3):220-223.
- LEE, R.D., JOHNSON, R. & JOYCE, P. 2008. *Public budgeting systems*. 8th ed. Massachusett: Jones and Bartlett.
- LEEDY, P.D. & ORMROD, J.E. 2013. *Practical research: planning and design*. 10th ed. Essex: Pearson.
- LENDEL, V. 2007. The value net. *Journal of Information, Control & Management Systems*, 5(2):1-3.
- LIBBY, T. & LINDSAY, R.M. 2010. Beyond budgeting or budgeting reconsidered? A survey of North American budgeting practice. *Management Accounting Research*, 2(1):56-75.
- LIENERT, I. 2010. Role of the legislature in budget process. [Online]. Available at: <<https://www.imf.org/external/pubs/ft/tnm/2010/tnm1004.pdf>>. Accessed: 23/04/2020.
- LIMA, T. 2006. Michael Porter's "five forces" model. [Online]. Available at: <[http://arfuso.weebly.com/uploads/9/9/6/1/996130/porters\\_5\\_forces\\_model.pdf](http://arfuso.weebly.com/uploads/9/9/6/1/996130/porters_5_forces_model.pdf)>. Accessed: 15/02/2020.

- LIONIS, K. 2014. Industry analysis. [Online]. Available at: <<https://www.scribd.com/document/332414956/Industry-Analysis>>. Accessed: 17/04/2020.
- LITMAN, T. 2020. Planning principles and practices. [Online]. Available at: <<https://www.vtpi.org/planning.pdf>>. Accessed: 25/05/2020.
- LOBIONDO-WOOD, G., HABER, J. & SINGH, M. 2014. *Nursing research in Canada: methods, critical appraisal and utilisation*. Mosby: Elsevier.
- LUNENBURG, F.C. 2011. Goal-setting theory of motivation. *International Journal of Management, Business & Administration*, 15(1):1-6.
- MACKEY, A. & GASS, S.M. 2016. *Second language research: methodology and design*. New Jersey: Lawrence Erlbaum.
- MALHOTRA, N. K. 2006. *Marketing research: an applied orientation*. 4th ed. New Jersey: Pearson.
- MANIKANDAN, S. 2011. Frequency distribution. *Journal of Pharmacology & Pharmacotherapeutics*, 2(1):54-56.
- MANISCALCO, C.S. & MANISCALCO, P.M. 2000. Budget 101: introduction to the budget process for non-financial managers. *Emergency Medical Services*, 29(2):1-10.
- MANSOR, M. & TAYIB, M. 2012. Strategic planning in public organisation: the case of a tax administration in a developing country. *Business Management Dynamics*, 1(8):20-33.
- MANUEL, E. 2007. The analysis of five competitive forces of non-alcoholic beverage Industry and e-commerce industry cases at the global level. *SSRN Electronic Journal*, 1-17.
- MAREE, K. 2010. *First steps in research*. 5th ed. Pretoria: Van Schaik.

MAXEGWANA, M. 2012. Improving the existing public sector strategic planning guidelines towards integrated provincial and local government strategic planning processes: lessons from the Eastern Cape. MPA. Thesis. Stellenbosch University.

MAZZARA, L., SIBONI, B. & SANGIORGI, D. 2011. Strategic planning practices in Italian local governments: what compliance with the European recommendations? Paper submitted to 7TAD Seventh Transatlantic Dialogue Strategic Management of Public Organisations.

MBURU, S.N. & THUO, J.K. 2015. Understanding the concept of strategic intent. *International Refereed Journal of Engineering & Science*, 4(6):57-60.

MCAFEE, R.P., MIALON, H.M. & WILLIAMS, M.A. 2004. What is a barrier to entry? *American Economic Review*, 94(2):461-465.

MCMILLAN, J.H. & SCHUMACHER, S. 2001. *Research in education: a conceptual introduction*. 5th ed. New York: Longman.

McNABB, D.E. 2008. *Research methods in public administration and non-profit management: quantitative and qualitative approaches*. 3rd ed. New York: Sharpe.

MIHAILA, S., GHEDROVICI, O. & BADICU, G. 2015. The importance of budgeting for strategy implementation. *European Journal of Accounting, Finance & Business*, 3(2):57-69.

MILARA, I.M. 2014. Comparison of resources and capabilities in two companies. [Online]. Available at:

<[https://pdfs.semanticscholar.org/5c41/c636f1c4e1490dc6150f906f616922200f6e.pdf?\\_ga=2.167164281.637809971.1596180588-1368164699.1596044433](https://pdfs.semanticscholar.org/5c41/c636f1c4e1490dc6150f906f616922200f6e.pdf?_ga=2.167164281.637809971.1596180588-1368164699.1596044433)>. Accessed: 20/04/2020.

MILLARD, S. 2010. Characteristics of mission and vision statements. [Online]. Available at: <[https://hilo.hawaii.edu/strategicplan/documents/SPC21\\_10\\_Mission\\_and\\_Vision.pdf](https://hilo.hawaii.edu/strategicplan/documents/SPC21_10_Mission_and_Vision.pdf)>. Accessed: 15/05/2020.

MILLER, A. 1998. *Strategic Management*. 3rd ed. London: McGraw-Hill.

MILLER, J. & GALEAZ, G.R. 2007. Ways to improve budgeting and forecasting: financial services companies should take a strategic approach to better link financial planning with strategic direction. *Bank Accounting & Finance*, 20 (5):39-41.

MOHAJAN, H.K. 2017. Two criteria for good measurements in research: validity and reliability. *Annals of Spiru Haret University Economic Series*, 17(4):59-82.

MOOI, E. 2014. Regression analysis. [Online]. Available at:  
<[file:///C:/Users/TM/Downloads/Chapter7AConciseGuidetoMarketResearch\\_book.pdf](file:///C:/Users/TM/Downloads/Chapter7AConciseGuidetoMarketResearch_book.pdf)>.  
Accessed: 14/02/2020.

MORDKOFF, J.T. 2016. Descriptive statistics. [Online]. Available at:  
<<http://www2.psychology.uiowa.edu/faculty/mordkoff/GradStats/part%201/I.05%20dsrptvs.pdf>>. Accessed: 15/03/2020.

MUCHIRA, W.N. 2013. Relationship between strategy implementation and performance in commercial banks in Kenya. MBA. Mini thesis. University of Nairobi.

MURIUKI, M.P. & STANLEY, K. 2015. Determinant of strategic plan implementation in organisations: a case study of Chai trading company limited. *The International Journal of Business & Management*, 3(4):215-225.

MURTADA, M.B.E.A. & HAMDAN, M.N.M. 2016. The role of government financial management information system in raising the effectiveness of the government budgeting. *International Journal of Business & Social Science*, 7(6):244-261.

NATIONAL TREASURY. 2001. Treasury regulations for departments, constitution institutions and public entities. [Online]. Available at: <  
[http://www.treasury.gov.za/legislation/pfma/regulations/gazette\\_22219.pdf](http://www.treasury.gov.za/legislation/pfma/regulations/gazette_22219.pdf)>. Accessed: 01/03/2020.

NAVAZ-LOPEZ, J.E. & GUERRAS-MARTÍN, L.A. 2018. *Fundamentals of strategic management*. 2nd ed. London: Thomson Reuters.

- NDIWALANA, J.K. 2002. Budgeting participation, goal commitment and employee performance. MSc. Dissertation. Uganda: Makerere University.
- NICKOLS, F. 2016. Strategy definitions and meanings. [Online]. Available: <[http://50.87.121.26/strategy\\_definitions.pdf](http://50.87.121.26/strategy_definitions.pdf)>. Accessed: 12/03/2020.
- NIENHUESER, W. 2008. Resource dependence theory: how well does it explain behaviour of organisations? *Management Revue*, 19(1/2):9-32.
- NOBLE, H. & SMITH, J. 2015. Issues of validity and reliability in qualitative research. *Evidence Based Nursing*, 18, (2):34-35.
- O'CONNOR, B. 2000. SPSS and SAS programs for determining the numbers of components using parallel analysis and Velicer's MAP test. *Behaviour Research Methods*, 32(3): 396-402.
- O'SHANNASSY, T. 2016. Strategic intent: the literature, the construct and its role in predicting organisation performance. *Journal of Management & Organisation*, 22(5):1-16.
- ODERA, P.A. 2014. Factors influencing strategic planning process by major sugar producing firms in Kenya. MBA. Mini thesis. University of Nairobi.
- ODITA, A.O. & BELLO, A. 2015. Strategic intent and organisational performance: a study of banks in Asaba, Delta State Nigeria. *Information & Knowledge Management*, 5(4):60-71.
- OECD. 2014. OECD principles of budgetary governance: public governance and territorial development. [Online]. Available at: <<http://www.oecd.org/governance/budgeting/Draft-Principles-Budgetary-Governance.pdf>>. Accessed: 15/02/2020.
- OKPANACHI, J. & MOHAMMED, N.A. 2013. Budget target setting and effective performance measurement in Nigerian hospitality industry. *Journal of Finance & Economics*, 1(3):39-50.
- OLSEN, N.D. & OLSEN, H.W. 2009. Elements of a strategic plan. *NACBA Ledger*, 22-31.

OTHMAN, R., ARSHAD, R., ARIS, N.A. & ARIF, S.M. 2015. Organisational resources and sustained competitive advantage of cooperative organisations in Malaysia. *Procedia - Social & Behavioural Sciences*, 170:120-127.

PALLANT, J. 2013. *SPSS survival manual: a step by step guide to data analysis using SPSS*. 4th ed. London: McGraw-Hill.

PAPULOVA, Z. 2014. The significance of vision and mission development for enterprises in Slovak republic. *Journal of Economics, Business & Management*, 2(1):12-16.

PARDAMEAN, B. & SETYODEWI, H. 2014. Information system model of a work-plan budget. *Journal of Software*, 9(5):1095-1106.

PARLIAMENT OF THE REPUBLIC OF SOUTH AFRICA. 2011. Budget analysis manual. [Online]. Available at: <https://www.parliament.gov.za/storage/app/media/BusinessPubs/BudgetAnalysisManual.pdf>. Accessed: 15/05/2020.

PARTIDÁRIO, M.R. 2012. Strategic environmental assessment better practice guide. methodological guidance for strategic thinking in SEA. Available at: <https://www.iaia.org/pdf/special-publications/SEA%20Guidance%20Portugal.pdf>. Accessed: 25/04/2020.

PATEL, P. 2009. Introduction to quantitative methods. [Online]. Available at: [https://hls.harvard.edu/content/uploads/2011/12/quantitative\\_methods.pdf](https://hls.harvard.edu/content/uploads/2011/12/quantitative_methods.pdf). Accessed: 18/03/2020.

PEARCE, J.A. & ROBINSON, R.B. 2013. *Strategic management: planning for domestic and global competition*. 13th ed. New York: McGraw-Hill.

PEERSMAN, G. 2014. Overview: data collection and analysis methods in impact evaluation. Available at: [https://www.unicef-irc.org/publications/pdf/brief\\_10\\_data\\_collection\\_analysis\\_eng.pdf](https://www.unicef-irc.org/publications/pdf/brief_10_data_collection_analysis_eng.pdf). Accessed: 28/03/2020.

PENG, M.W. 2014. *Global strategy*. 3rd ed. Ohio: Cengage.

PERRIN, K.M. 2016. *Essentials of planning and evaluation for public health*. Massachusetts: Jones & Bartlett Learning.

PFEFFER, J. & SALANCIK, G. 1978. *The external control of organisations: a resource dependence perspective*. New York: Harper & Row.

PFEFFER, J. 2003. Introduction to the classic edition. In PFEFFER, J. & SALANCIK, G.R., ed. *The external control of organisations: a resource dependence perspective*. California: Stanford.

PIETERSEN, J. & MAREE, K. 2016. Standardisation of a questionnaire. In Maree, K., ed. *First steps in research*. 2nd ed. Pretoria: Van Schaik. Pp. 238-247.

PÎNDICHE, E. & LONITA, R. 2013. The influence of micro and macro environment components on trade companies in Romania. *Journal of Knowledge Management, Economics & Information Technology*, 3(6):1-23.

PLONSKY, L. 2015. *Advancing quantitative methods in second language research*. New York: Routledge Taylor & Francis.

POISTER, T.H. 2010. The future of strategic planning in the public sector: linking strategic management and performance. *Public Administration Review*, 70:246-254.

POLIT, D.F. & BECK, C.T. 2008. *Nursing research: generating and assessing evidence for nursing practice*. 8th ed. Philadelphia: Wilkins.

PORTER, M.E. 2004. Competitive advantage: creating and sustaining superior performance. *Competitive Advantage Creating & Sustaining Superior Performance*, 1(94):145-146.

PORTER, M.E. 2008. The five competitive forces that shape strategy. [Online]. Available at: <<https://hbr.org/2008/01/the-five-competitive-forces-that-shape-strategy>>. Accessed: 30/05/2020.

POWELL, K.K. & REY, M.P. 2015. Exploring a resource dependency perspective as an organisational strategy for building resource capacity: implications for public higher education universities. *Management in Education*, 29(3) 94-99.

PROFESSIONAL TESTING. 2006. Test validity. [Online]. Available at: <[http://www.proftesting.com/test\\_topics/test\\_quality.php](http://www.proftesting.com/test_topics/test_quality.php)>. Accessed: 25/05/2020.

PROPHIX. 2016. Best practices for planning & budgeting. [Online]. Available at: <<https://www.encorebusiness.com/wp-content/uploads/2016/09/best-practices-for-planning-budgeting.pdf>>. Accessed: 12/03/2020.

PWC. 2012. CFO budgeting survey: realising the value of budgeting and forecasting through priorities, processes, and accuracy measures. Available at: <[https://www.pwc.lu/en/finance-function-effectiveness/docs/pwc-cfo-survey-2012.pdf?WT.rss\\_f=PwC+Luxembourg+-+Latest+News&WT.rss\\_ev=a&WT.rss\\_a=CFO+Budgeting+Survey](https://www.pwc.lu/en/finance-function-effectiveness/docs/pwc-cfo-survey-2012.pdf?WT.rss_f=PwC+Luxembourg+-+Latest+News&WT.rss_ev=a&WT.rss_a=CFO+Budgeting+Survey)>. Accessed: 20/04/2020.

RAJASEKAR, S., PHILOMINATHAN, P. & CHINNATHAMBI, V. 2013. Research methodology. [Online]. Available at: <<file:///C:/Users/TM/Downloads/resserachmethodology.pdf>>. Accessed: 20/04/2020.

RAKABE, E. 2013. Effective intergovernmental planning and budgeting for better outcomes. [Online]. Available at: <[file:///C:/Users/TM/Downloads/2013\\_Policy\\_Brief\\_5\\_Effective\\_Intergovernmental\\_Planning\\_and\\_Budgeting\\_for\\_Better\\_Outcomes.pdf](file:///C:/Users/TM/Downloads/2013_Policy_Brief_5_Effective_Intergovernmental_Planning_and_Budgeting_for_Better_Outcomes.pdf)>. Accessed: 18/04/2020.

REPUBLIC OF SOUTH AFRICA. 2009. Green paper: national strategic planning. Pretoria: Government Printer.

REPUBLIC OF SOUTH AFRICA. National Treasury. 2000. In year management, monitoring and reporting. [Online]. Available at: <<http://www.treasury.gov.za/legislation/pfma/guidelines/Guide%20on%20In->



[%20Year%20Management,%20Monitoring%20and%20Reporting.pdf](#)>. Accessed: 15/05/2020.

REPUBLIC OF SOUTH AFRICA. 2000. Local government: municipal systems Act 32 of 2000. [Online]. Available at: <<https://ffc.co.za/docs/acts/Local%20Government%20Municipal%20Systems%20Act%20No%2032%20of%202000%20as%20amended.pdf>>. Accessed: 12/05/2020.

REPUBLIC OF SOUTH AFRICA. National Treasury. 2002. Treasury regulations for departments, trading entities, constitutional institutions and public entities. [Online]. Available at: <[http://www.treasury.gov.za/legislation/pfma/regulations/gazette\\_27388.pdf](http://www.treasury.gov.za/legislation/pfma/regulations/gazette_27388.pdf)>. Accessed: 13/04/2020.

REPUBLIC OF SOUTH AFRICA. National Treasury. 2010. Framework for strategic plans and annual performance plans. Pretoria: Government Printer.

REPUBLIC OF SOUTH AFRICA. National Treasury. 2017. MTEF technical guidelines for national departments. [Online]. Available at: <<http://www.treasury.gov.za/publications/guidelines/2018%20MTEF%20Technical%20Guidelines%20for%20National.pdf>>. Accessed: 13/06/2020.

REPUBLIC OF SOUTH AFRICA. 2014-2019. Medium-term strategic framework (MTSF). [Online]. Available at: <[https://www.gov.za/sites/default/files/gcis\\_document/201409/mtsf2014-2019.pdf](https://www.gov.za/sites/default/files/gcis_document/201409/mtsf2014-2019.pdf)>. Accessed: 23/04/2020.

REPUBLIC OF SOUTH AFRICA. Public Service Commission. 2008. Basic concepts in monitoring and valuation. Pretoria: Government Printer.

REZVANI, M., GILANINIA, S. & MOUSAVIAN, S.J. 2011. Strategic planning: a tool for managing organisations in competitive environments. *Australian Journal of Basic & Applied Sciences*, 5(9):1537-1546.

- RITSON, N. 2011. Strategic management. [Online]. Available at  
<<https://www.kau.edu.sa/Files/0057862/Subjects/Strategic%20Management%20Book.pdf>>.  
Accessed 14/01/2020.
- ROGERS, W. 2003. Strategy analysis and choice. [Online]. Available at:  
<<http://www2.nkust.edu.tw/~hgyang/Module%206.pdf>>. Accessed: 14/05/2020.
- ROSS, L. 2008. Budgeting: Topic Gateway Series No. 27. [Online]. Available at:  
<[https://www.cimaglobal.com/Documents/ImportedDocuments/cig\\_tg\\_budgeting\\_mar08.pdf](https://www.cimaglobal.com/Documents/ImportedDocuments/cig_tg_budgeting_mar08.pdf)>.  
>. Accessed: 18/04/2020.
- ROWLEY, J. 2014. Designing and using research questionnaires. *Management Research Review*, 37(3):308-330.
- RUBIN, A. & BABBIE, E.R. 2011. Research methods for social work. 7th ed. California: Cengage.
- RUDNICKI, W. & VAGNER, I. 2014. Methods of strategic analysis and proposed method of measuring productivity of a company. *The Malopolska School of Economics in Tarnow Research Papers Collection*, 25(2): 175-184.
- RUSHTON, R.J. 2012. The efficacy of environmental impact assessment in Saskatchewan's forest resource sector. MA. Thesis. Saskatoon: University of Saskatchewan.
- SAHU, P.K. 2013. *Research methodology: a guide for researchers in agricultural science, social science and other related fields*. Delhi: Springer.
- SALIMIAN, H., KHALILI, S., NAZEMI, J. & ALBORZI, M. 2012. Alignment in the organizations strategy window (concentration on business strategy and operations strategy). *African Journal of Business Management*, 6(51):12016-12022.
- SALKIND, N.J. 2010. *Encyclopedia of research design*. California: Sage.
- SAMMUT-BONNICI, T. & GALEA, D. 2015. SWOT analysis. In Cooper, C.L., ed. *Wiley Encyclopedia of Management*, New York: Wiley. Pp. 1-9.

- SAMUELS, P. 2017. Advice on exploratory factor analysis. [Online]. Available at: <<file:///C:/Users/TM/Downloads/ExploratoryFactorAnalysis4.pdf>>. Accessed: 28/04/2020.
- SANTHAKUMARAN, A. & SARGUNAMARY, G. 2008. *Research methodology*. Kumbakonam: Anuradha.
- SARANTAKOS, S. 2013. *Social Research*. 4th ed. New York: Palgrave.
- SEKULIĆ, V. 2002. The importance of corporate strategic processes in managing efficiency of enterprise. *Economics & Organisation*, 1(10):67-74.
- SHAH, N. 2011. Ethical issues in biomedical research publication. *Journal of Conservative Dentistry*, 14(3):205–207.
- SHAPIRO, J. 2001. Budgeting. [Online]. Available at: <<https://www.civicus.org/documents/toolkits/Budgeting.pdf>>. Accessed: 03/01/2020.
- SHEAFFER, Z., LANDAU, D. & DRORI, I. 2008. Mission statement and performance: an evidence of coming of age. *Organisational Development Journal*, 26(2):49-62.
- SHOWKAT, N. & PARVEEN, H. 2017. Non-probability and probability sampling. [Online]. Available at: <<file:///C:/Users/TM/Downloads/150114863016cre-textnayeemshowkatnonprobabilityandprobabilitysampling.pdf>>. Accessed: 14/06/2020.
- SIGDEL, S. 2014. A description and analysis of the budget formulation and implementation process in Nepal. [Online]. Available at: <<https://pdfs.semanticscholar.org/e526/a01c25c61ff843b92d1322eeffc510c82496.pdf>>. Accessed: 12/01/2020.
- SINGH, A. & MASUKU, M. 2014. Sampling techniques & determination of sample size in applied statistics research: an overview. *International Journal of Commerce & Management*, 2(11):1-22.

SLATER, S.F. & OLSON, E.C. 2002. A fresh look at industry and market analysis. (Understanding markets beyond the Five Competitive Forces Model). *Business Horizons*, 45(1):1-8.

SMITH, K. & DAVIES, J. 2010. Qualitative data analysis. In Dahlberg, L. & McCaig, C. eds., *Practical research and evaluation: a start-to-finish guide for practitioners*. London: Sage.

SOFIANU, N. 2010. Public Budgeting: a case study of the Republic of Moldova. MSc. Thesis. Prague: Charles University.

SOUTH AFRICA LEGISLATIVE SECTOR. 2012. Oversight model of the South African legislative sector. [Online]. Available at: [http://www.sals.gov.za/research/oversight\\_model.pdf](http://www.sals.gov.za/research/oversight_model.pdf). Accessed: 17/05/2020.

SPENCER, F.H., BORNHOLT, L.J. & OUVRIER, R.A. 2003. The test reliability and stability of children's cognitive functioning. *Journal of Child Neurology*, 18 (1):5-11.

STIGLER, G.J. 1968. *The organisation of Industry*. Chicago: University of Chicago Press.

SUHR, D. & SHAY, M. 2009. Guidelines for reliability, confirmatory and exploratory factor analysis. [Online]. Available at: <http://www.wuss.org/proceedings09/09WUSSProceedings/papers/anl/ANL-SuhrShay.pdf>. Accessed: 04/05/2019.

SULLIVAN, J.J. 2006. Strategic assessment and plan: a four-phased approach. [Online]. Available at: [https://www.regent.edu/acad/global/publications/sl\\_proceedings/2006/sullivan.pdf](https://www.regent.edu/acad/global/publications/sl_proceedings/2006/sullivan.pdf). Accessed: 12/04/2020.

SYKES, L.M., GANII, M.F. & VALLY, Z. 2016. Statistical terms Part 1: the meaning of the MEAN, and other statistical terms commonly used in medical research. *South African Dental Journal*, 71(6): 274 - 278.

TABACHNICK, B.G. & FIDELL, L.S. 2007. *Using Multivariate Statistics*. 5th ed. New York: Allyn and Bacon.

TABER, K. 2017. The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48:1273-1296.

TAHERDOOST, H. 2016. Sampling methods in research methodology: how to choose a sampling technique for research. *International Journal of Academic Research in Management*, 5(2):18-27.

TAHERDOOST, H. 2016. Validity and reliability of the research instrument: how to test the validation of a questionnaire survey in a research. *International Journal of Academic Research in Management*, 5(3):28-36.

TAI, S.H.C. 2005. Shopping styles of working Chinese females. *Journal of Retailing & Consumer Services*, 12(3):191-203.

TAIWO, A.A., LAWAL, F.A. & AGWU, M.E. 2016. Vision and mission in organisation: myth or heuristic device? *The International Journal of Business & Management*, 4(3):127-134.

TALLOO, T. J. 2007. *Business organisation and management*. New Delhi: McGraw-Hill.

TANAKA, S. 2007. Engaging the public in national budgeting: a non-governmental perspective. *OECD Journal on Budgeting*, 7(2):139-177.

TANG, W., CUI, Y. & BABENKO, O. 2014. Internal consistency. Do we really know what it is and how to access it. *Journal of Psychology & Behavioural Science*, 2(2):205–220.

TARIQ, U. 2020. Difference between micro and macro environment. [Online]. Available at: <<https://www.studocu.com/row/document/university-of-karachi/marketing-management/tutorial-work/difference-between-micro-and-macro-environment/6718700/view>>. Accessed: 12/03/2020.

TASHAKKORI, A. & CRESWELL, J.W. 2007. Editorial: the new era of mixed methods. *Journal of Mixed Methods Research*, 1(1): 3-7.

TASK FORCE ON THE HARMONISATION OF PUBLIC SECTOR ACCOUNTING.

2006. Fourth meeting of the advisory expert group on national accounts. [Online]. Available at: <<https://unstats.un.org/unsd/nationalaccount/AEG/papers/m4Conclusions.pdf>>.

Accessed:15/04/2020.

TAVAKOL, M. & DENNICK, R. 2011. Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2:53-55.

TEAM FME. 2013. SWOT analysis: strategy skills. [Online]. Available at: <<http://www.free-management-ebooks.com/>>. Accessed: 20/04/2020.

THABANE, L., MA, J., CHU, R., CHENG, J., ISMAILA, A., RIOS, L.P., ROBSON, R., THABANE, M., GIANREGORIO, L. & GOLDSMITH, C.H. 2010. A tutorial on pilot studies: the what, why and how. *BMC Medical Research Methodology*, 10(1):1-10.

THARWAT, A.2016. Principal component analysis - a tutorial. *International Journal of Applied Pattern Recognition*, 3(3):197-240.

THATCHER, R.W. 2010. Validity and reliability of quantitative electroencephalography. *Journal of Neurotherapy*, 14(2):122-152.

THOMAS, J., NELSON, J. & SILVERMAN, S. 2010. *Research methods in physical activity*. 6th ed. New York: Human Kinetics.

TWYLCROSS, A. & SHIELDS, L. 2004. How do children 's nurses make clinical decisions? Two preliminary studies. *Journal of Clinical Nursing*, 15:1324-1335.

UNESCO. 2010. Strategic planning: concept and rationale. [Online]. Available at: <<https://unesdoc.unesco.org/ark:/48223/pf0000189757>>. Accessed: 12/05/2020.

URSACHI, G., HORODNIC, I.A. & ZAIT, A. 2015. 7th International Conference on Globalization and Higher Education in Economics and Business Administration, GEBA. *Procedia Economics & Finance*, 20:679-686.

VAN BUUREN, A., & NOOTEBOOM, S. 2009. Evaluating strategic environmental assessment in The Netherlands: content, process and procedure as indissoluble criteria for effectiveness. *Impact Assessment & Project Appraisal*, 27(2):145-154.

VAN MIEGHEM, J.A. 2011. *Operations management and strategy*. Massachusetts: Dynamic Ideas.

VAN PAPENDORP, H. & PACKIRISAMY, S. 2017. State of the Nation Address. Government's agenda for 2017. [Online]. Available at:  
<<https://www.momentuminv.co.za/docs/default-source/current-commentary/state-of-the-nation-address---10-february-2017.pdf>>. Accessed: 28/03/2020.

VAN TEIJLINGEN, E.R. & HUNDLEY, V. 2002. The importance of pilot studies. *Nursing Standard*, 35:1-5.

VANDERSTOEP, S.W. & JOHNSTON, D.D. 2009. *Research methods for everyday life: blending qualitative and quantitative approaches*. San Francisco: Jossey-Bass.

VITSHA, X. 2003. Promoting accountability in the budget cycle: the experiences of the public service accountability monitor in South Africa. [Online]. Available at:  
<<https://www.internationalbudget.org/wp-content/uploads/Promoting-Accountability-in-the-Budget-Cycle-The-Experience-of-Public-Service-Accountability-Monitor-in-South-Africa.pdf>>. Accessed: 22/03/2020.

VOICULET, A., BELU, N., PARPANDEL, D.L. & RIZEA, I.C. 2010. The impact of external environment on organisational development strategy. [Online]. Available at:  
<[https://mpa.ub.uni-muenchen.de/26303/1/Impact\\_of\\_external\\_environment\\_in\\_develop](https://mpa.ub.uni-muenchen.de/26303/1/Impact_of_external_environment_in_develop)>. Accessed: 15/05/2020.

WALLIMAN, N. 2011. *Your research project: designing and planning your work*. London: Sage.

WANJOHI, N.E. 2013. Strategic control systems in strategy implementation and financial performance of Bamburi Cement Limited, KENYA. MBA. Dissertation. University of Nairobi.

WAUTERS, B. 2017. Strategic management in the public sector: a tool of improving performance of ongoing operations or for redefining performance to meet new challenges. [Online]. Available at: <[file:///C:/Users/TM/Downloads/20170323-24\\_pag\\_tn\\_presentation\\_benedict\\_wauters.pdf](file:///C:/Users/TM/Downloads/20170323-24_pag_tn_presentation_benedict_wauters.pdf)>. Accessed: 18/04/2020.

WEGNER, T. 2012. *Applied business statistics: methods and excel-based applications*. 3rd ed. Cape Town: Juta.

WERNER, N. 2008. Resource dependence theory: How well does it explain behaviour of organizations? *Management Revue*, 19 (1/2): 9-32.

WHEELEN, T.L. & HUNGER, D.J. 2006. *Concepts in strategic management and business policy*. London: Pearson.

WILLEMSE, L. 2009. *Statistical methods and calculation skills*. Claremount: Juta.

WILLIAMS, B., BROWN, T. & ONSMAN, A. 2012. Exploratory factor analysis: a five-step guide for novices. *Journal of Emergency Primary Health Care*, 8(3):1-13.

WILSON, A. 2014. Strategic vs annual planning. [Online]. Available at: <<http://www.MayesWilsonAssociates.com>>. Accessed: 15/03/2020.

WORLD BANK 2014. Sudan state-level public expenditure review: meeting the challenges of poverty reduction and basic service delivery. [Online]. Available at: <<https://openknowledge.worldbank.org/bitstream/handle/10986/23506/Background0papers.pdf?sequence=1>>. Accessed: 12/04/2020.

WU, Y. & MA, H. 2019. Challenges for integrating strategic environmental assessment to enhance environmental thinking: a case study of Taiwan energy policy. *Sustainability*, 11(609):1-23.



YAGHMAEI, F. 2003. Content validity and its estimation. *Journal of Medical Education*, 3(1):25-27.

YAM, Y. 2016. The influence of macro and micro-environmental factors on the consumption of mobile phones and marketing strategies. PhD. Thesis. Southern Cross University.

YAPA, A.P. 2003. Parliament and the budgetary process, including from a gender perspective. [Online]. Available at: <<http://archive.ipu.org/splz-e/srilanka03.pdf>>. Accessed: 12/05/2020.

YONG, A.G. & PEARCE, S. 2013. A beginner's guide to factor analysis: focusing on exploratory factor analysis. *Tutorials in Quantitative Methods for Psychology*, 9(2):79-94.

ZEHIR, C, FINDIKLI, M.A, & ÇELTEKLİGİL, K. 2018. Resource dependence theory, firm performance and producers-suppliers relationship. *The European Proceedings of Social & Behavioural Sciences*, 160-172.

## ANNEXURE A

### CONSENT LETTER

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#### LETTER OF PARTICIPATION

Dear Respondent/Participant,

My name is Namadzavho Violet, Matshidza. I am a Master's degree student in the Department of Business Administration, Faculty of Management Sciences at the Vaal University of Technology. I am conducting a research study **on strategic planning and its alignment with the budgeting process in selected National Government Departments**. I kindly request you to fill in this questionnaire. All the information collected from the questionnaire will be used for academic purposes only and will be kept in strict confidence.

Your biographical information in this study is very important and is required for statistical purposes only. Please note that this is an anonymous questionnaire, do not write your name, staff number or any other personal information anywhere in the document.

If you have any queries, please contact me or my research supervisor (details listed below).

Thank you for your time.

---

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## **ANNEXURE B**

### **QUESTIONNAIRE**

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#### **Instructions:**

Kindly assist by completing the attached questionnaire and note that this is an anonymous questionnaire, questionnaire consists of a number of questions about the strategic planning and budgeting process in your department. This study will assist government department to improve on strategic planning and budget process after completion.

Please indicate the extent to which you agree or disagree with the statements by marking a cross (x) inside the box with the corresponding number from 1 (Strongly disagree) to 5 (Strongly agree) in relation to the strategic planning and budget process in your department.

## SECTION A: BIOGRAPHICAL INFORMATION

You are requested to mark with a cross (x) inside the box that contains the information relevant to you.

A1	Gender	Male	Female
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A2	Age category	21-30 ears	31-40 years	41-50 years	51-60 years	61 years & older
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A3	Race	African	Coloured	Indian	White	Other (Specify)
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A4	Highest qualification	Diploma	Degree	Honours / Postgraduate diploma	Master's degree	PhD	Other (Specify)
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A5	Current position	Budget analyst	Manager	Executive Manager	Programme Manager	Director	Chief Director	Deputy Director General/
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A6	Number of years in senior management position	Under 10 years	11-20 years	21-30 years	31-40 years	40 years & above
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## SECTION B: STRATEGIC PLANNING

In this section, there are statements about strategic planning process. Please indicate the extent to which you agree or disagree with the statements by marking a cross (x) inside the box with the corresponding number from 1 (Strongly disagree) to 5 (Strongly agree).

B1	Top executives take formal responsibility for the	Strongly disagree	1	2	3	4	5	Strongly agree
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	Department's strategic planning							
B2	Strategic planning is a top priority activity that is performed on a regular basis (e.g. each year)	Strongly disagree	1	2	3	4	5	Strongly agree
B3	The Department provides resources (managers' time, staff support, etc.) for strategic planning implementation	Strongly disagree	1	2	3	4	5	Strongly agree
B4	The Department consistently follows a defined set of procedures in its strategic planning process	Strongly disagree	1	2	3	4	5	Strongly agree
B5	Managers whose work might be affected significantly by strategic plans participate in the planning process	Strongly disagree	1	2	3	4	5	Strongly agree
B6	The Department has a written mission statement	Strongly disagree	1	2	3	4	5	Strongly agree
B7	This mission statement is distributed to all the Department's staff	Strongly disagree	1	2	3	4	5	Strongly agree
B8	All the Department's staff, particularly management and higher-level staff understand this mission	Strongly disagree	1	2	3	4	5	Strongly agree
B9	The Department has written longer-term goals (3-5 years) and short-term (1 year and less) goals	Strongly disagree	1	2	3	4	5	Strongly agree
B10	These goals list quantified measurable targets (e.g., how many customers will be served?)	Strongly disagree	1	2	3	4	5	Strongly agree
B11	The goals specify targets by region	Strongly disagree	1	2	3	4	5	Strongly agree
B12	When appropriate, the goals list quality, time frame, and cost targets. They are observable or measurable	Strongly disagree	1	2	3	4	5	Strongly agree
B13	The goals appear realistic yet challenging, based upon	Strongly disagree	1	2	3	4	5	Strongly agree

	experience and/or customer research							
B14	The Department has information systems in place, which facilitate measuring actual performance versus goals	Strongly disagree	1	2	3	4	5	Strongly agree
B15	Management and higher-level staff whose responsibilities are affected participate in setting goals	Strongly disagree	1	2	3	4	5	Strongly agree
B16	The Department periodically gathers information about its customers, stakeholders and other external factors that affect its operations	Strongly disagree	1	2	3	4	5	Strongly agree
B17	The external/market analysis identify threats to the Department's key opportunities	Strongly disagree	1	2	3	4	5	Strongly agree
B18	The analysis include detailed analysis of the Department's geographical target audiences	Strongly disagree	1	2	3	4	5	Strongly agree
B19	The Department's performance and operational characteristics are compared on a regular basis to its perceived "competitors"	Strongly disagree	1	2	3	4	5	Strongly agree
B20	Demographic, behavioural, and other trends among the Department's customers and potential customers are analysed	Strongly disagree	1	2	3	4	5	Strongly agree
B21	The Department regularly assesses its operating environment as a whole, weighing new competitors and concepts, new technologies, procurement practices, labour practices, etc.	Strongly disagree	1	2	3	4	5	Strongly agree
B22	The Department assesses factors such as the cost and availability of	Strongly disagree	1	2	3	4	5	Strongly agree

	funds, electioneering and politicking, government regulations, and the economy							
B23	The Department has knowledge of and access to sources of information about its customers, stakeholders, and other external factors	Strongly disagree	1	2	3	4	5	Strongly agree
B24	The Department analyses its own core business operations objectively	Strongly disagree	1	2	3	4	5	Strongly agree
B25	This internal analysis identify the key strengths and weaknesses of the organisation	Strongly disagree	1	2	3	4	5	Strongly agree
B26	The analysis include political and other external factors, which affect your Department's budget	Strongly disagree	1	2	3	4	5	Strongly agree
B27	It includes a consideration of budgetary allocation for promotion of the Department's activities	Strongly disagree	1	2	3	4	5	Strongly agree
B28	It includes quality of customer service and, in general, employee productivity	Strongly disagree	1	2	3	4	5	Strongly agree
B29	The Department regularly assesses its human resource development programmes (recruitment, training, promotion)	Strongly disagree	1	2	3	4	5	Strongly agree
B30	The Department's management information system provides relatively easy access to the internal data discussed above	Strongly disagree	1	2	3	4	5	Strongly agree
B31	After completing its external and internal analyses,  The Department reviews the mission and goals in light of the apparent threats/opportunities and strengths/weaknesses	Strongly disagree	1	2	3	4	5	Strongly agree

B32	Based upon such a review, strategic diagnosis culminates in identifying key strategic issues (e.g., redeployment of staff, change in direction of activities)	Strongly disagree	1	2	3	4	5	Strongly agree
B33	The Department uses strategic (situational) diagnosis to formulate strategic plan options	Strongly disagree	1	2	3	4	5	Strongly agree
B34	The Department considers performance enhancement options (e.g., cost reduction, alternative suppliers, production technique improvement)	Strongly disagree	1	2	3	4	5	Strongly agree
B35	The Department considers customer education possibilities (methods for keeping your customers apprised of the ways that they can use your Department's services)	Strongly disagree	1	2	3	4	5	Strongly agree
B36	The Department considers management options (such as restructuring, merging with other agencies)	Strongly disagree	1	2	3	4	5	Strongly agree
B37	The Department considers research and development options (e.g., product/service enhancement, new products)	Strongly disagree	1	2	3	4	5	Strongly agree
B38	Formal evaluation study findings are factored into the Department's strategic planning process	Strongly disagree	1	2	3	4	5	Strongly agree
B39	The Department decides its strategic plans are based upon feasibility and risk/return criteria	Strongly disagree	1	2	3	4	5	Strongly agree
B40	The Department makes strategic decisions (implementation action plans) based upon the strategic plan	Strongly disagree	1	2	3	4	5	Strongly agree
B41	The Department clearly assigns lead responsibility for action plan implementation to one person	Strongly disagree	1	2	3	4	5	Strongly agree



B42	Sufficient resources are allocated for implementation	Strongly disagree	1	2	3	4	5	Strongly agree
B43	The Department sets clearly defined, measurable performance standards for each element of the plan	Strongly disagree	1	2	3	4	5	Strongly agree
B44	The Department develops an organised system for monitoring how well those performance standards are met	Strongly disagree	1	2	3	4	5	Strongly agree
B45	The Department reviews monitoring data regularly, and revise strategic decisions as appropriate	Strongly disagree	1	2	3	4	5	Strongly agree
B46	Individuals responsible for strategic planning and implementation are rewarded for successful performance	Strongly disagree	1	2	3	4	5	Strongly agree

## SECTION C: BUDGET PROCESS

This section consists of statements which describe budget process. Please indicate the extent to which you agree or disagree with each statement by making a cross (x) inside the box with the corresponding number from 1 (Strongly disagree) to 5 (Strongly agree).

C1	Budgets are time consuming and costly to put together	Strongly disagree	1	2	3	4	5	Strongly agree
C2	Budgets constrain responsiveness and flexibility and are often a barrier to change	Strongly disagree	1	2	3	4	5	Strongly agree
C3	Budgets are rarely strategically focused and are often contradictory	Strongly disagree	1	2	3	4	5	Strongly agree
C4	Budgets add little value, especially given the time required to prepare them	Strongly disagree	1	2	3	4	5	Strongly agree

C5	Budgets concentrate on cost reduction and not on value creation	Strongly disagree	1	2	3	4	5	Strongly agree
C6	Budgets strengthen vertical command and control	Strongly disagree	1	2	3	4	5	Strongly agree
C7	Budgets do not reflect the emerging network structures that organisations are adopting	Strongly disagree	1	2	3	4	5	Strongly agree
C8	Budgets encourage 'gaming' and perverse behaviours	Strongly disagree	1	2	3	4	5	Strongly agree
C9	Budgets are developed and updated too infrequently, usually annually	Strongly disagree	1	2	3	4	5	Strongly agree
C10	Budgets are based on unsupported assumptions and guess-work	Strongly disagree	1	2	3	4	5	Strongly agree
C11	Budgets reinforce departmental barriers rather than encourage knowledge sharing	Strongly disagree	1	2	3	4	5	Strongly agree
C12	Budgets make people feel under-valued	Strongly disagree	1	2	3	4	5	Strongly agree

**Your cooperation in the survey is sincerely appreciated**

**ANNEXURE C**  
**EDITING LETTER**

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Linda Scott  
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26 May 2020

To whom it may concern

This is to confirm that I, the undersigned, have language edited the **dissertation** of

**Namadzavho Violet Matshidza**

for the degree

**Magister Technologiae: Business Administration**

entitled:

*Strategic planning and its alignment with the budgeting process in selected national  
government departments*

The responsibility of implementing the recommended language changes rests with the  
author of the document.

Yours truly,



Linda Scott