

UNIVERSITY OF KWAZULU-NATAL

**EMPLOYEE FRAUD AND PREVENTION STRATEGIES
AT UNIVERSITIES IN KWAZULU-NATAL**

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(Management and Public Administration)**

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2015

DECLARATION

I, Ranesh Sivnarain, declare that

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DEDICATION

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ABSTRACT

The results of continuing global research, including this study, have found that employee fraud is ubiquitous. An analysis of the crime statistics relating to fraud in South Africa reflects a similar picture. This study delved into employee fraud at universities in KwaZulu-Natal by evaluating the nature and causes of this phenomenon as well as the preventative measures that are, or should be, implemented to obviate the risk of fraud at universities. The study of fraud and corruption at universities in KwaZulu-Natal represents a microcosm of such crimes at national and international universities.

The objectives of this study were to gain knowledge and understanding of the causes and nature of employee fraud and to establish other measures that could prevent fraud as well as to propose a conceptual model and recommendations which universities could use to prevent fraud. In order to achieve these objectives, the study included an extensive review of recent and relevant literature, an empirical survey, review of case files and interviews with knowledgeable individuals in the field of fraud risk management. In addition, the study provides an overview of historical and philosophical origins of the theoretical concepts and frameworks and models relating to employee fraud, fraud risk management, internal controls and governance of fraud risks. Results indicate that employee fraud is considered a risk to the sustainability of higher education, *vis-à-vis* the provision of tertiary education to the community.

A conceptual model is proposed to address employee fraud at universities. The conceptual input/output transformational systems model adapted from Easton (A systems analysis of political life (1979)) was utilised as a sophisticated addition to the set of recommendations provided in the last chapter. Despite its particular shortcomings, this model would be useful as a concept clarifier to those entrusted with designing and implementing policy at universities destined to elevate the fraud prevention process. The conceptual model advocates a holistic approach to prevent fraud. In responding to stakeholder demands to combat fraud, universities should implement specific policies that would transform any such dysfunctionalities within its operations to enable it to achieve its predetermined educational goals.

Supplementary to the adapted input/output transformational systems model for prevention of fraud and corruption at universities in KwaZulu-Natal, a set of recommendations is proposed that is intended to provide policy-makers with information about the inputs from the environments that impact the achievement of goals and that proposes a conversion mechanism which could support achieving, maintaining and enhancing of predetermined goals. The prevention of employee fraud would be beneficial to all stakeholders, such as the community, government and universities, nationally and internationally.

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CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 INTRODUCTION

It is evident from the crime statistics which were released by the South African Police Service (SAPS) on their website (SAPS, 2013), that commercial crimes have increased significantly and progressively over the past decade. The SAPS refer to commercial crime as a catch-all term for fraud and corruption. These statistics do not differentiate who the perpetrators of commercial crime are, for example, whether they are employees of the victim organisation or external third parties. Within the Republic of South Africa, commercial crimes have escalated from 55 869 incidents during 2003 to 91 569 incidents during 2013 (SAPS, 2013), which equates to an increase of 63.9% in commercial crimes in South Africa.

According to a global survey by the Association of Certified Fraud Examiners (ACFE) (2012:4) in the report to nations about occupational fraud, most organisations lose approximately 5% of revenue to fraud every year, equating to an annual global loss to fraud in excess of \$3.5 trillion (R42 trillion). Employee fraud thus has significant impact on organisations throughout the world.

A global forensic auditing firm, KPMG (2011:21), conducted an analysis of global fraud patterns where it was found that internal control weaknesses were an increasing contributor to the commission of fraud. KPMG (2011:10) concluded that economic factors play a role which leads companies to reduce their costs, resulting in a smaller number of people left to monitor the internal controls. This situation affords fraudsters the opportunity to commit fraud, a view supported by Sivnarain (2010:49). KPMG (2011:10) asserts that companies need to carefully consider cost reduction measures in conjunction with adequate fraud risk management.

Peltier-Rivest (2014:37) suggests that universities are often defrauded as the internal control environment is based on openness, collegiality and academic freedom, with resistance from staff to being controlled, leading to incompatible duties not being segregated and a lack of monitoring. Fraud at universities have been reported on in newspaper articles; copies of some are attached as Appendices 8, 9 and 10 to this thesis.

The intention of this research was, *inter alia*, to conceptualise the concept “fraud”, how and why it is committed, what internal controls are currently in place, and what other factors have led to the commission of fraud within the context of South Africa in general and KwaZulu-Natal universities in particular. It intends further to propose and recommend methods and procedures to monitor and/or prevent its occurrence in the workplace. Certain international trends can be universally applied to the South African situation.

Understanding the causes that lead to fraud being committed and subsequently concealed by employees, is valuable in attempting to prevent fraud from being committed in the future. Cressey (1973:30), a criminologist, created a hypotheses that three factors contribute to the commission of fraud. Firstly, there is personal pressure on a person. Secondly, there is a violation of a position of trust by that person. Thirdly, the person justifies their conduct.

The research intended to establish the causes of employee fraud and how universities that are victims of employee fraud could provide valuable information that would be useful in developing and implementing effective strategies to prevent fraud. According to Ratcliffe (2005:439), the interpretation and influence of crime information both occupy a key role in the prevention of fraud. Information gathered from the victims about the commission, concealment and detection of the fraud is pivotal in assisting employers to design or enhance fraud resistant internal controls to prevent fraud in the workplace. The prevention of the crime of fraud is supported by Zinn (2007:111), who asserts that crime information can be used as a proactive measure in the prevention thereof.

Investigating fraud is a reactive process whereby the employer has incurred a loss of funds, and faces further costs of the forensic investigation, legal and other fees for disciplinary enquiries and civil litigation. According to Laufer (2011:402), an organisation may be further prejudiced due to legal and investigation costs. It would be cost-effective to prevent employees from committing fraud, than to investigate fraud after it has taken place. The cost of forensic investigations is exorbitant, and has resulted in the emergence of flourishing companies providing forensic investigation services throughout South Africa to cater for the need in this niche market.

The King Code of Governance for South Africa (2009:44-46), which is commonly referred to as King III, asserts that the Internal Audit department within an organisation has to assess

how adequate and effective the systems of internal control and risk management are and present a report in this regard to the governing body/Board. The objective is for the Internal Audit department to provide independent assurance to the Board that the system of internal controls is adequate and working as intended, to prevent fraud.

According to Rae and Subramaniam (2008:106), internal control, as a management tool, has gained prominence in the recent past as a critical element to ensure sound corporate governance in preventing and detecting fraud. They argue that further studies should be undertaken in order to understand the internal control environment better and to design robust internal control strategies to detect and prevent fraud.

Albrecht (1996:26) asserts that the absence or over-riding of internal controls creates an opportunity for all employees to commit fraud. Albrecht (1996:26) found that the usual symptoms of fraud are deficient internal controls, poor segregation of duties, non-existent independent verification, non-existent physical safeguard, deficient authorisations by those in charge, deficient documentation, controls that are over-ridden and a poor system of accounting.

According to Sivnarain (2010:67), deficiencies in the internal control environment should be identified and addressed in order to prevent fraud. Buckhoff (2002:64) concurs that the most appropriate way to reduce or eradicate opportunities for the perpetration of fraud is to design and implement robust systems of internal controls, because fraud is perpetrated when there are opportunities to do so. Robust internal controls, as espoused in King III (2009:14), are essential for sound governance and ultimate success of any organisation.

Although Hillison *et al.* (1999:354) concur that opportunities to commit fraud arise when internal controls are poor or non-existent, they found that opportunities are also created when an employee is highly trusted. This study focuses on the causes of employee fraud and the prevention strategies employed by universities in KwaZulu-Natal, in advancement of good governance. It is envisaged that the evidence from the study will assist university management in identifying key internal controls that need to be implemented or enhanced in order to make universities and other organisations fraud resistant.

A preliminary search was carried out on the NRF Lexus database of completed research projects in South Africa, which indicated that no research was conducted on the exact topic "Employee Fraud and Prevention Strategies at Universities in KwaZulu-Natal".

The ACFE (2012) highlighted in its Report to the Nations the global trends in respect of fraud. However, the report did not provide any specific solutions to prevent fraud from occurring. Further literature, such as a thesis on convicted house robbers as a source of crime information by Zinn (2007:4), focused on convicted criminals involved in house robberies only. It did not deal with fraud and governance. In an unpublished dissertation on the profiling of fraudsters, Sivnarain (2010:3) focused on how fraud offenders should be profiled for purposes of investigations into fraud. The study did not focus on the causes of fraud nor the prevention thereof.

King III (2009:44), which was released by the Institute of Directors, highlights the need to ensure that internal controls are adequate and effective in preventing fraud, but does not specify what the internal controls should be. KPMG (2011:21) conducted an analysis of global patterns of fraud. This report focused on reporting global fraud trends, but did not provide specific solutions on making the internal control environment robust enough to be fraud resistant.

Price Waterhouse Coopers (PwC) (2011:18) conducted a global economic crime survey which focused on fraud trends and the detection of fraud. However, the report did not deal with the prevention of fraud or the designing or enhancement of the internal control environment to make it fraud resistant.

Although various literature has been written and research undertaken on fraud and fraud prevention, this does not appear to have stemmed the tide of escalating employee fraud. The above preliminary literature review reflected that further research in this particular proposed area was required and would be valuable. This research focused, *inter alia*, on evaluating the knowledge of staff and experts about what the nature of fraud is, what causes it, how extensive it is and what impact it has on universities in KwaZulu-Natal. It also evaluated strategies put in place to prevent the risk of fraud at these universities.

1.2 DEFINITION OF CONCEPTS

1.2.1 Fraud

According to Snyman (1987:456), fraud is “*the unlawful and intentional making of a misrepresentation which causes actual prejudice or which is potentially prejudicial to another*”.

1.2.2 Employee

According to Wells (2013:2), an employee is an individual who receives regular compensation for providing his or her labour, and includes executive, senior and middle managers as well as contracted and other employees.

1.2.3 Employee Fraud

The ACFE (2012:6) define employee fraud as a person who uses his or her occupation to enrich themselves by misusing their employer’s resources.

1.2.4 Fraud Prevention

Fraud prevention is a defined programme comprising of proactive measures aimed at preventing fraud or mitigating it (Adams *et al.*, 2006:56).

1.2.5 Internal Control

The Committee of Sponsoring Organisations of the Treadway Commission COSO (2013:2) defines internal controls as a method that is implemented by directors of a board, management, and other staff, with the purpose of providing reasonable assurance that the defined objectives will be achieved relating to operations, reporting, and compliance.

1.2.6 Corporate Governance

A generally accepted definition of corporate governance by the Cadbury Committee (1992:15) is that it is a process to direct and control companies.

1.3 FORMULATION OF THE RESEARCH PROBLEM

The perpetration of employee fraud appears to be pervasive despite the existence of internal controls which are intended to prevent fraud from taking place. Employees who commit fraud contribute to 56% of the loss incurred by organisations, according to PwC (2011:18).

According to the ACFE (2012:5), approximately 50 percent of the organisations who were victims of fraud during 2010 to 2011, were not able to recover any of the losses from the fraudster. The statistics on the South African Police Service (SAPS) website (SAPS 2013) reflect that fraud, which is categorised as a commercial crime, had increased by 63.9% in South Africa between 2003 and 2013. With the escalation of the number of incidents of commercial crime, the cost of the loss to the victim organisations can also be expected to escalate. In support of this statement, the ACFE (2012:14) in its Report to the Nations, noted that organisations lose approximately 5% of their income every year to fraud.

Losses due to employee fraud need to be prevented, as the cost of the loss is not limited to the amount that has been defrauded. The loss does not include the cost to have the matter investigated, disciplinary action, dismissal arbitration, civil litigation and criminal prosecution. This study proposes recommendations that focus on the proactive prevention of fraud. It provides an understanding about what causes fraud and what counter measures should be implemented to prevent fraud from occurring. The recommendations emanating from this study are intended to arrest escalation of fraud at universities that may intensify if the trends recorded in various surveys are continuing. These resultant losses may place an undue burden on the government and taxpayers, who have to provide further funding to universities by means of increased taxes.

The South African National Development Plan 2030 (NDP) (2012:57) suggests that procurement policies in the public sector are ineffective and susceptible to fraud due to the manner in which compliance with the policy is tested. The crime of corruption, which is intrinsically linked to fraud, appears to be pervasive to the extent that this offence is specifically addressed in the NDP. The NDP (2012:445) proposes enhanced public awareness of these crimes as one of the means of prevention. It (2012:450) advocates whistle blowing as one of the means of exposing such wrongdoings.

1.4 RESEARCH QUESTIONS

The research questions driving this research were posed as set out below:

- What are the causes of employee fraud at universities in KwaZulu-Natal?
- What is the current nature and extent of fraud committed by employees at universities in KwaZulu-Natal?
- What fraud-prevention measures are currently in place to manage fraud at universities in KwaZulu-Natal?
- What fraud prevention measures and procedures could be recommended to universities for implementation on various levels?

1.5 OBJECTIVES OF THE STUDY

The objectives of the study were:

- To establish the main causes of employee fraud as found in the literature.
- To conduct an empirical survey to determine the extent of fraud and factors relevant thereto in the practical arena, with the resultant statistical analysis and recommendations to deal with the dysfunctional situation as set out in the problem statement.
- To establish what additional measures are put in place to prevent fraud as found in the literature.
- To propose a theoretical model and set of recommendations for fraud prevention at universities in general and in KwaZulu-Natal in particular.

1.6 SIGNIFICANCE OF THE STUDY

Fraud affects every facet of the economy and the community. The number of incidents of fraud is increasing, coupled with the value of losses to the economy. The damage to the reputation and image of an organisation which becomes victim to fraud, is immeasurable. This research provides an improvement aimed at minimising, if not preventing, and detecting fraud at universities in KwaZulu-Natal. Management at these universities would benefit from the outcomes of this research which provides practical recommendations that would assist them to prevent fraud that is committed by employees.

1.7 RESEARCH DEMARCATION

Research should be manageable. To ensure this, it should be done in a demarcated area based on considerations of sample size, available time as well as economic reasons. Geographical demarcation ensures that research can be carried out economically. Mouton (2001:40) suggests that a demarcated study ensures that the research is done soundly as opposed to a wide study which may not be completed on time.

According to the Higher Education South Africa (2014) website, South Africa has twenty-five public universities, which are located in various provinces within the country. Due to economic and logistical considerations, this study was limited to the four universities which are located in different parts of the province of KwaZulu-Natal. A search on the websites of each of the four universities indicated that they all had different organisational structures. Regardless or perhaps more so because of their differences, much could be gained from this study to prevent fraud. Similarly, although this study was conducted in KwaZulu-Natal, it is envisaged that the findings and recommendations would be applicable to public universities in South Africa and elsewhere. This demarcation of the study area is regarded as a microcosm of the South African population of universities that can be universally applicable within the broader higher education environment in this country and elsewhere.

There are four universities in the province of KwaZulu-Natal. They are the University of KwaZulu-Natal, University of Zululand, Mangosuthu University of Technology and Durban University of Technology. The province of KwaZulu-Natal has three different types of public universities. These three types of universities are also found in the rest of South Africa. Firstly, there are the traditional universities that offer Bachelor degrees and have sound research capacity. Secondly, there are universities of technology that offer vocationally oriented higher certificates, diplomas and degrees in technology and have some postgraduate and research capacity. Lastly, there are comprehensive universities that offer both Bachelor and technology qualifications focusing on teaching and conducting research and postgraduate study. The University of KwaZulu-Natal is a traditional university, whereas the University of Zululand is a comprehensive university. Durban and Mangosuthu are universities of technology. The demarcation of this area for the study ensured that data were collected from all three types of universities in KwaZulu-Natal, which represent other public universities in South Africa as well. The study focused on frauds committed by employees against their universities in

KwaZulu-Natal, but the recommendations about internal controls, fraud risk management, and sound governance are universally applicable to all sectors of the economy in South Africa and globally.

1.8 RESEARCH METHODOLOGY

Welman and Kruger (1999:2) state that research methodology incorporates research methods and techniques, where the reasoning for the methods is contemplated and clarified. According to Mouton (2001:56), research methodology is concerned with the process and tools needed for the research.

The research methodology employed for this study includes a literature search and empirical survey. The phases of the research incorporated a literature search and an empirical survey that includes sampling, quantitative and qualitative data collection, statistical analysis of data, and the interpretation, presentation and articulation of the results of the statistical analysis. The detailed descriptions of the various phases are provided in Chapter Seven.

1.8.1 Literature Search

Literature was sourced from the latest relevant books, academic journals, legislation, published and unpublished research as well as other literature sources, in order to acquire enhanced understanding and knowledge about employee fraud at universities in KwaZulu-Natal. The search of available and relevant literature was required to ascertain what studies had previously been conducted on topics that were integral to this research. Mouton (2001:91) suggests that the literature search should be based on the research problem and should be logical. The objective of a literature search is to ascertain the latest, pertinent and reliable studies in a particular research area (Mouton, 2001:87).

The review of literature included primary and secondary sources. According to Welman and Kruger (1999:36), a primary source, such as a witness or participant, provides information about what they experienced first-hand; this may include an incident or an audio recording, photographic or video footage thereof. Welman and Kruger (1999:36) state that indirect information is obtained from a secondary source about an incident.

A survey of primary sources encompassed relevant South African legislation, the Internal Control Integrated Framework of the Committee of Sponsoring Organisations of the Treadway Commission, the King Code of Governance for South Africa of the Institute of Directors, as well as the KPMG Whitepaper on Fraud Risk Management. A survey of secondary sources encompassed journal articles, textbooks, legislation, internet websites as well as unpublished research theses and dissertations. Emanating from the literature search, relevant theoretical criteria were identified. These criteria, together with the results of the empirical survey, were utilised to develop a theoretical model and a set of recommendations towards greater understanding and managing the research problem.

1.8.1.1 Extracting Selected Theoretical Criteria from the Literature

Based on the literature review, a selection of theoretical criteria were extracted from the following models and frameworks regarded as relevant to the study of employee fraud and prevention strategies at universities in KwaZulu-Natal:

- Fraud triangle model of Cressey (1973:30);
- Fraud diamond model of Wolfe and Hermanson (2004:38);
- Fraud risk management model of KPMG (2006:20);
- Internal control integrated framework of COSO (2013:5), and
- King III corporate governance framework of IODSA (2009:16).

1.8.1.2 Public Administration

Universities in KwaZulu-Natal are public-funded institutions and as such fall under the realm of public administration. Employee fraud and prevention strategies at universities in KwaZulu-Natal affect the manner in which public universities are administered or managed. The literature search provided an understanding of the nexus between employee fraud at public universities in KwaZulu-Natal and public administration. According to Thornhill (2012:93), public officials are expected to abide by stipulated ethical guidelines when they carry out their duties, which are the cornerstone of public administration. Relevant theoretical criteria for ethical conduct in the public sector were identified and utilised in the development of a theoretical model to understand and manage the research problem.

1.8.1.3 Fraud Case Files

The review of literature also included a review of 12 fraud case files pertaining to fraud cases that were investigated at the four universities in KwaZulu-Natal. The overall number of fraud cases that were investigated were not very large; therefore, the selection of a sample of those cases was not necessary (Bailey, 1987:78). A determination about the quantum of fraud case files for review was made as the research progressed. The review of available fraud case files pertained to matters that were investigated during 2013 only.

1.8.1.4 Knowledgeable Individuals

During the collection of data from literature sources the study also included selecting, on a purposive non-probability sampling basis, knowledgeable individuals in the province of KwaZulu-Natal who could contribute to this research, such as directors of forensic auditing companies as well as forensic investigators employed by universities. These individuals possess vast experience and knowledge about investigating fraud at universities.

The theoretical criteria sourced from the literature and the above models are elaborated on in more detail in ensuing chapters.

1.8.2 Empirical Survey

After the literature search and concomitant identification of selected theoretical criteria, an empirical survey was embarked on. According to the Merriam-Webster Dictionary (2014), empirical means “*based on testing or experience*”. A survey questionnaire, which is attached as Appendix 2, was used to collect specific and relevant data from participants to record their knowledge and experience about fraud committed by employees. Empirical data were gathered using a survey questionnaire. The collected data were provided to the statistician for analysis. The results of the statistical analysis of the responses to the empirical survey questionnaire was interpreted and incorporated into this study.

Quantitative and qualitative data were gathered by means of a survey questionnaire. The survey was carried out using a structured self-administered survey questionnaire (Babbie, 1998: 257-263), which was distributed electronically to all participants. The structured questions were both closed and open-ended. Closed-ended questions were based on a five-

point Likert scale. The scale measured attitudes in terms of two sets of five dependent variables, namely, 1: “strongly disagree, disagree, neither agree nor disagree, agree, strongly agree” and 2: “never, rarely, sometimes, often and always”. This configuration was validated by the qualified, registered, institutional statistician. The purpose of open-ended questions was to afford the participants the opportunity to expand on their answers for the purposes of clarification, or to express an opinion on the issue. The options of “yes” or “no” answers were also provided in the questionnaire. Both quantitative data, such as biographical information of participants, and qualitative data such as the participants’ opinions were sought by means of the survey questionnaire. The use of both quantitative and qualitative approaches is known as triangulation (Leedy, 1993:143). The triangulation approach enabled accurate conclusions to be made from the research based on both the qualitative and quantitative methods. Such an approach positively impacted the validity and reliability of this research. The survey questionnaire ensured that relevant and applicable data were collected.

The questions in the structured interview schedule aimed at the collection of quantitative data were mainly of a closed and multiple-choice type question, from which collected responses revealed relevant and pertinent information which could be numerically presented and statistically analysed

1.8.3 The Research Population and Sample

The total research population was the staff employed at the four chosen universities in KwaZulu-Natal. The total possible research population, sample population and response population were determined in collaboration with the institutional statistician. A random sample of executive managers and senior managers at the four universities in KwaZulu-Natal were chosen for this study. There was a total of 31 executive managers and 83 senior managers at the four universities in KwaZulu-Natal. The number of participants from both categories of management totalled 114. Additionally, there was a total of 7 vacant posts in both categories. All members of the target population were requested to participate in this survey by completing the online survey questionnaire. The above *modus operandi* was validated by the registered university statistician.

1.8.4 Data Collection

The data collection instruments, including the methods used for quantitative and qualitative data, were agreed upon in consultation with the statistician. Quantitative data were collected using a survey questionnaire based on a five-point Likert Scale. The survey questionnaire contained both open-ended and closed-ended questions.

1.8.5 Statistical Analysis of the Responses to the Questionnaire

According to Mouton (2001:108), the purpose of analysing data is to understand how they relate to and between concepts, constructs and variables, and to identify any themes, patterns or trends in the data. The collected data, which could be numerically presented, were analysed by the statistician by means of recognised statistical methods and analytical instruments. The manner in which the quantitative and qualitative data was analysed is elaborated on in Chapter Seven. The statistician has provided a letter that is attached as Appendix 5.

1.8.6 Interpretation, Presentation and Articulation of the Results of the Statistical Analysis

The data collated from the empirical survey, incorporating the survey questionnaires and face-to-face interviews, were analysed by the statistician by using recognised statistical instruments. This process is further elaborated on in the relevant chapter on statistical analysis of the empirical data. The results were subsequently interpreted by the researcher and presented in the form of tables, figures and charts. The presentation and explanation of the results and findings of this study is expounded in Chapter Eight.

1.9 CONTRIBUTION OF THE STUDY TO THE EXISTING BODY OF KNOWLEDGE IN THE FIELD

This study has been designed to make a contribution to the current body of knowledge in the field of fraud risk management within universities in KwaZulu-Natal and forms a nexus between expansive preventive internal controls, ethical conduct and the prevention of fraud within universities. The proactive prevention of fraud will not only positively assist in the sustainability of organisations but also contribute towards the entrenchment of ethical conduct and business practices.

The study proposes a list of expansive fraud-resistant measures which can be implemented within universities in South Africa. The findings of the research are beneficial to management at the universities as it will equip them to adequately and effectively manage fraud risks with the ultimate objective of minimising losses.

A conceptual model was designed and recommended, supplementary to the set of recommendations in the last chapter as a contribution towards the existing body of knowledge for effective and efficient management of fraud at universities and other organisations in general. This proposed conceptual model is unique in that it reflects a holistic approach to preventing employee fraud by incorporating fraud risk management, internal controls and corporate governance interventions. The guitar analogy to a systems model depicts the input, transformation, output and feedback phases of a systems model. The model is original in that it also depicts an essential factor of “ethical tone” which is a vital foundation for setting a sound ethical culture at universities in KwaZulu-Natal, like a well-tuned guitar. This study will assist higher education institutions in focusing on the scourge of fraud and placing this topic on the regular agenda of management and executives. A reduction in financial loss, due to fraud, may ease the burden on universities as well as the community in the form of reduced student fees. The combating of fraud may also benefit tax payers and the government, as funds that are defrauded should have been used for purposes for which they are ultimately intended, the education of citizens.

1.10 ETHICAL CONSIDERATIONS

Researchers should take into account ethical considerations when conducting research. Leedy and Ormrod (2001:107) show that participants should be provided with sufficient information in order to consent; no harm should come to them; their privacy rights should be guaranteed and the researcher has to be truthful with professional colleagues. Welman and Kruger (1999:181) show that participants have to be given assurance about their anonymity when the research findings are released. Participants have a right to privacy, which was maintained and respected in this study. They were assured they would not be subjected to any reputational harm.

According to Leedy and Ormrod (2001:108), findings should be reported truthfully and sources have to be acknowledged. All sources were cited in the text and the list of references.

Welman and Kruger (1999:181) believe that participants have to be assured that their identities will not be revealed when the findings of the research are released.

The research thesis was subjected to the Turnitin system to establish the similarity index. Prior to distributing the survey questionnaire, the Ethics Committee of the University of KwaZulu-Natal (UKZN) was approached to provide ethical clearance; which was subsequently granted and is attached as Appendix 1. In order to proceed with this research, approval was also requested from each of the four universities located in the province of KwaZulu-Natal. Approval was received from all four universities permitting the research at the respective universities.

The participants were provided with a covering letter that set out the purpose of the research. The document reflected that their participation was voluntary and that they would not be reimbursed for it. Participants were also informed that it was their right to choose not to answer certain questions and to withdraw from participating at any time. They were assured of their anonymity and the confidentiality of the information they provided. Their written consent, which is attached as Appendix 3, to participate in the study was obtained.

1.11 ORGANISATION OF THE RESEARCH/STRUCTURE OF THE THESIS

This thesis contains nine chapters. These chapters elaborate on the various concepts raised in the study.

Chapter One: Serves as an introduction to the study and introduces the problem statement, the key questions, the objectives, the demarcation of the study area and the research methodology.

Chapter Two: Philosophical and Theoretical Foundations of the Causes of Employee Fraud and Prevention Strategies

This chapter sets out the foundations in relation to the causes of employee fraud as well as strategies intended to prevent fraud from occurring in the workplace. The focus was on previous research conducted in this area as well as on selected models and frameworks.

Chapter Three: Theoretical and Practical Perspectives of Employee Fraud

The chapter elaborates on the nature and extent of fraud; the *modi operandi*, motive and profile of fraudsters. This chapter also explains the applicability of the fraud triangle and fraud diamond models.

Chapter Four: Perspectives of Fraud Prevention

In this chapter, prevention of fraud is expounded, based on the KPMG fraud risk management model.

Chapter Five: Historical and Contemporary Perspectives of Internal Control

Chapter Five deals with internal controls as a means of preventing fraud. The COSO Internal Control Integrated Framework is expanded from a prevention of fraud perspective.

Chapter Six: Perspectives of Corporate Governance

This chapter consists of explanations of corporate governance as a contributor to the prevention of fraud. The King III Corporate Governance Framework is elaborated on in relation to its link to preventing fraud risks.

Chapter Seven: Research Methodology

The research methodology employed in this study is explained in detail. The areas covered include the research design, approach, strategy, data collection methods, data analysis methods, sampling technique, validity and reliability and ethical considerations.

Chapter Eight: Interpretation, Presentation and Articulation of the Results of the Statistical Analysis

In this chapter, the results and findings of the study are explained in detail, covering the areas of employee fraud, fraud prevention, internal control and corporate governance.

Chapter Nine: Model Theories and Proposal of Conceptual Model

Chapter Nine elaborates on the model theories pertaining to employee fraud, fraud prevention, internal control mechanisms and corporate governance. In particular, a conceptual framework is proposed to deal with preventing employee fraud. The model supplements the set of recommendations provided in the last chapter. The model supplements the set of recommendations provided in the last chapter.

Chapter Ten: Recommendations and Concluding Remarks

The recommendations and concluding remarks emanating from this study are contained in this chapter. References that were cited in this thesis are acknowledged in the reference list.

1.12 SUMMARY

Incidents of fraud are escalating both in South Africa and globally. Consequently, so too is the cost of losses to organisations. Based on ongoing global surveys, employee fraud seems to be continuing unabated, despite measures being implemented to prevent it. Internal controls are not the only solution to preventing fraud. The ethical culture of an organisation also occupies an essential role in the fight against fraud. Although trust and collegiality are essential in maintaining a sound working environment, these two aspects of trust and collegiality require a degree of circumspection on the part of management.

In the chapters that follow, the search for knowledge and understanding of the nature and extent of employee fraud is explained and rationalised and what current measures can be proffered to prevent fraud from occurring. In this regard, various models and frameworks are examined on how employee fraud is being prevented currently. Emanating from this study is a conceptual model for fraud prevention, as proposed in Chapter Nine.

CHAPTER TWO

PHILOSOPHICAL AND THEORETICAL FOUNDATIONS OF THE CAUSES OF EMPLOYEE FRAUD AND PREVENTION STRATEGIES

2.1 INTRODUCTION

In order to establish what employee fraud is, one has to consider firstly, what fraud is. The Concise Oxford Dictionary (1990:467) defines fraud as “*criminal deception by the use of false representations to gain an unjust advantage*”. According to the Merriam-Webster Dictionary (2014), fraud is defined as “*deceit or trickery; specifically: the intentional perversion of truth in order to induce another to part with something of value or to surrender a legal right*”.

According to Snyman (1987:9), fraud falls under the ambit of common law. Common law in South Africa refers to the rules of law that are not legislated in parliament or other legislative body and are referred to in Roman-Dutch law. Roman law, according to Snyman (1987:5), has its origin around 450 B.C. According to Snyman (1987:7), Roman law was merged with local customary law in the Netherlands and gradually became known as Roman-Dutch law between the thirteenth and sixteenth centuries.

The Merriam-Webster Dictionary (2014) defines prevention as “*the act or practice of stopping something bad from happening*”. For the purpose of this study, a fraud prevention measure is regarded as an action that is taken to obstruct the occurrence of a fraudulent activity. Early strategies to prevent fraud emerged during the eighteenth century when reference was made by Blackstone (1753:381) to the need to prevent fraud.

Modern day fraud prevention strategies are associated with the Committee of Sponsoring Organisations of the Treadway Commission (COSO), which was established during 1985. According to the COSO website (COSO, 2014), the organisation originated in 1985 to sponsor the National Commission on Fraudulent Financial Reporting in the United States of America. This was an initiative that was implemented by the private sector to establish what the root causes were that led to fraudulent financial reporting by organisations. The objective was to assist organisations to prevent fraud from occurring. In attempting to address the problem outlined in this study, a review of literature on early criminology is provided in this chapter.

2.2 EMPLOYEE FRAUD

Snyman (1987:456) avers that fraud is a crime in terms of South African criminal law. Should this statement be accepted, then the pervasiveness of employee fraud has to be investigated. Firstly, this study researched the reasons why employees commit fraud: their motives for committing fraud could provide an indication of the root causes of employee fraud. Secondly, the methods used by employees to commit fraud, namely, their *modi operandi* had to be identified and evaluated. This section briefly elaborates on the theoretical and historical origins of employee fraud which is regarded as relevant to the study of employee fraud and prevention strategies at universities in KwaZulu-Natal.

2.2.1 Fraud during the Roman Empire

According to Garnsey (1968:7), fraud was dealt with in terms of civil law and not criminal law during the Roman Empire. All requests for a civil suit were sent to the praetor (magistrate) who would receive and scrutinise the complaint and make a decision on whether to appoint a private judge or not. The praetor was expected to deny a request of a commoner for civil action against a person from the upper class for fraud.

Garnsey (1968:9) shows that during the period of the Roman Empire, 27 B.C. to A.D. 235, judges and juries were chosen from the upper classes of society. These judges and juries were impressed by the social status, wealth and reputable character of people from the upper classes, even if they had committed a crime. Garnsey (1968:10) held that civil suits by common people against those from the upper classes were infrequent because of the common feelings and prejudices they shared with the praetors and judges of the time. This section should be considered when addressing employee fraud and prevention strategies at universities in KwaZulu-Natal in particular and in South Africa in general.

2.2.2 Fraud during the Greek Empire

According to Bakewell (2007:123), the Greek Empire saw the emergence of trade in gold and silver coins and other precious metals during the fifth century. This highlighted the nexus between finances and war during that period. Bakewell (2007:126) held that the increased number of currencies in existence at the time, quality and weight of the precious metals, existence of counterfeit coins, varying rates of commission charged as well as the lack of

reliable information provided fertile grounds for fraud. Fraud takes on various manifestations which should be considered when addressing employee fraud at universities in KwaZulu-Natal in particular and in South Africa in general.

2.2.3 Origins of Criminal Law

According to Burchell (2005:4), the word *crime* is derived from the Latin word “*crimen*”, which means accusation. Crime is not only an accusation. The Merriam-Webster Dictionary (2015) defines crime as “*an illegal act for which someone can be punished by the government*”. Schmaus (1994:130) quotes Emile Durkheim’s definition of crime as “*an act that merely seems harmful to society*”. Burchell (2005:18) holds that a criminal is a person who commits a crime. Crime is regarded as an action that contravenes a given criminal law. South African law, according to Burchell (2005:20), emerged from a range of different legal systems that existed in other parts of the world, such as the oldest contributor which was the law of Rome during the period 753 B.C. to the year 565.

Burchell (2005:20) observes that this system of criminal law evolved after the fall of the Roman Empire in Western Europe around the year 600. The law was based on the customs and laws of the “*Germanic*” people at the time. This law, according to Burchell (2005:20), evolved during the period 600 to 1500, influenced by the ethical values and morals which were based on Judaeo-Christian beliefs. The emergence of separate political states in Western Europe during the period 1500 to 1750 resulted in the establishment of different systems of criminal law as well (Burchell, 2005:20). According to Lee (2013:1), Roman Law was legislatively recognised in (Holland) the Netherlands during 1462. Roman-Dutch Law came into existence in 1528 in Holland. Roman-Dutch Law, according to Burchell (2005:20), emanated from Holland and was introduced to South Africa by the Dutch during the seventeenth century.

The above view is supported by Snyman (1987:9), who holds that Roman-Dutch Law was introduced to South Africa when Jan van Riebeeck, an official of the Dutch East India Company, landed in the Cape in 1652. According to Burchell (2005:32), Dutch Settlers arrived at the Cape of Good Hope during that time. The intention was to establish a refreshment station for passing ships. During the nineteenth century, new crimes were introduced in South Africa such as assault with the intention to commit other crimes; housebreaking with the intention to commit a crime; receiving stolen property knowing it to be stolen; culpable homicide and fraud

(Snyman, 1987:9). These are some of the crimes that are listed in Schedule 1 of the Criminal Procedure Act 51 of 1977, which is attached as Appendix 4 to this thesis. Common law in South Africa was derived from Roman-Dutch Law. Understanding the context of the origins of current legislation is regarded as relevant to the study of employee fraud and prevention strategies at universities in KwaZulu-Natal.

2.2.4 Natural Law

According to Blackstone (1753:46), natural law dealt fundamentally with the “*substantial happiness*” of a person; in essence, this was ethics. Any action that violated this natural law was prohibited and was binding all over the world. Blackstone explained that no other laws would have been required if man abided by natural law. Dorminey *et al.* (2012:572) postulate that the creation of an ethical work environment deters fraudsters because they will be aware of the likelihood of being apprehended and punished. According to Blackstone (1753:47), man is fallible, necessitating the enactment of “*human laws*” to address crime. He asserts that natural law is superior to all other subordinate laws. Blackstone (1753:48) argues that people do not only interact with their fellow citizens, they also interact with people from other nations.

Over time, it became essential to regulate this interaction between people of different nations with the creation of, what Blackstone termed, “*the law of nations*”. According to Blackstone (1753:48), the enforcement of the law of nations is the responsibility of each sovereign nation which is dependent on the rules of natural law and other agreements or treaties existing between the different nations. No nation can be regarded as superior to another in terms of the law of nations. Chitty (1844:v) cites Emmerich de Vattel, a Swiss jurist during the eighteenth century, who espoused the view that natural reasoning, which is practised by all mankind, is the law of nations that is followed by all people. The modern term for the law of nations is *international law*. The primary goal of the United Nations (UN) (2015) is to develop and administer international law. The legal responsibility of countries in terms of international law are, *inter alia*, human rights, international crime, disarmament and refugees. There are more than 500 multilateral treaties that have been signed between various countries with the involvement of the UN. In 1948, the UN established the International Law Commission to develop international law. According to the UN (2015), countries are bound by international law because they are signatories to the various treaties. The Rome Statute was created in 1998 by 120 countries and gave approval for the formation of the International Criminal Court

(ICC). The ICC is an international independent body that is based in The Hague in the Netherlands. According to the UN (2015), the ICC has heard 17 cases involving violation of international law. The role of natural law should be considered when addressing employee fraud and prevention strategies at universities in KwaZulu-Natal in particular and South Africa in general.

2.2.5 Criminality

According to Burchell (2005:18), despite the existence of criminal law, which prohibits different forms of criminal conduct, people continue to commit crimes while aware that punishment may result as a consequence of such criminal acts. Understanding why criminals commit crimes, while knowing that they will be punished, is an area of study in Criminology. Criminology is a science, according to Burchell (2005:18) that studies the committing of crime in relation to the person who perpetrates it, with the objective of explaining the phenomenon of crime *vis-à-vis* the criminal. According to Duff and Green (2011:1), one can only understand the foundations of criminal law through historians and sociologists, because of their skills in observing and interpreting its context from a historical and socio-political perspective. They aver that different disciplines provide varying perspectives on the philosophical foundations of criminal law. Duff and Green (2011:3) hold the view that criminal law was the “*messy outcome of the variegated, shifting forces that determined its historical development*”. This section has particular relevance to employee fraud and prevention strategies at universities in KwaZulu-Natal.

Lacey (2001:361) postulates that, during the eighteenth century, the law was based on the premise that the jury was able to identify criminality when they saw it. This premise was based on the known character and reputation of the accused person within the community. The criminal responsibility of the accused was not relevant. All he needed was to be perceived to be a law-abiding citizen. According to Lacey (2001:367), during the nineteenth century and partly the twentieth century, English criminal law functioned on the presumption that an accused had the intention to commit the crime with the resultant consequences. There was no clarity, at that time, between the application of subjective and objective tests to determine whether a rebuttal of this presumption could succeed or not. Lacey (2001:360) suggests that the criminal responsibility (blameworthy state of mind) of the accused became the subject of debate in legal circles during the 1950s. The emergence of legal counsel, attorneys, expert

witnesses and the evolution of the law of evidence contributed to the transformation of the judicial process. In associating the element of criminal intention with this study, it is accepted that fraud cannot be committed due to negligence on the part of the accused person. The accused has to have had the intention to commit fraud in present day. This section is particularly relevant to employee fraud and prevention strategies at universities in KwaZulu-Natal.

2.2.6 Criminal Procedure Act 51 of 1977

According to Hiemstra (1985:1), the first Criminal Procedure Act was promulgated in South Africa in 1917. It was Act 31 of 1917. A consolidation of the Act took place during 1956, resulting in the promulgation of Act 55 of 1956. Later, during 1977, the Act was revised once again and consolidated into Act 51 of 1977. The current Criminal Procedure Act 51 of 1977 is still in force in South Africa to this day, albeit with certain amendments since 1977. The Criminal Procedure Act 51 of 1977 sets out the procedures and other related aspects pertaining to proceedings in a court of law. Simply put, the Criminal Procedure Act regulates how cases relating to criminality are dealt with in a court of law in South Africa.

According to Hiemstra (1985:109), fraud, which is a focus of this study, is listed as an offence under Schedule 1 of the Criminal Procedure Act 51 of 1977. Fraud constitutes a criminal act which is punishable in terms of the Criminal Procedure Act 51 of 1977. In terms of this study, fraud committed by employees falls within the ambit of this Act. Employee fraud can be dealt with by an organisation at a disciplinary enquiry and by means of criminal prosecution, including civil litigation against the implicated employee/s. The Criminal Procedure Act 51 of 1977 is regarded as relevant to the study of employee fraud and prevention strategies at universities in KwaZulu-Natal.

2.2.7 Origins of Fraud

Snyman (1987:456) holds that fraud is derived from two specific crimes in Roman law: *stellionatus* and *crimina falsi*. *Stellionatus* could be equated to the delict of *dolus*, which is referred to in criminal law and involved the perpetrator in making a misrepresentation with the intention to cause prejudice to another. The term *crimina falsi* was used to refer to various crimes involving falsification, such as the falsification of a will. The term *dolus malus* refers to a vehicle employed for the purpose of cheating or circumventing existing authority. According

to the Merriam-Webster Dictionary (2015), “*dolus malus refers to fraud and misrepresentation that is actionable and punishable or is ground for rescinding the transaction resulting from it*”.

2.2.7.1 Crimes and Delicts

According to Snyman (1987:2), the difference between a crime and a delict is that a crime is punishable by the state in terms of criminal law. A delict involves the claim of compensation for damages suffered by an individual person in terms of civil law. It is possible for certain crimes to also be delicts and *vice versa*. An example is where a person who is assaulted by another, can claim for damages as well as lay a complaint of assault with the police. In relation to this study, the employer, who has been defrauded by an employee, can report the matter to the police and may also proceed to recover the financial loss (damages) in civil proceedings against the employee. According to Snyman (1987:457), the significant difference between these two former crimes was that *stellionatus* entailed the victim suffering patrimonial (property inherited from a person’s father) prejudice, whereas *crimina falsi* entailed no prejudice to a specific person.

2.2.7.2 Elements Constituting Fraud

According to Snyman (1987:457), common law requires four inherent elements to be present in order to render an act to be fraud. The four elements are:

- Misrepresentation
- Prejudice (actual or potential)
- Unlawfulness
- Intention

According to Burchell (2005:170), the criminal law pertaining to fraud was extended during the early twentieth century in South Africa to include potential prejudice. Burchell (2005:170) holds that the purpose for including potential prejudice in the definition of fraud was in order to distort the distinction made between fraud and attempted fraud.

Wells (2013:3) simplifies the four elements of fraud and reflects them as:

- A statement that is materially false.
- The accused’s awareness that he/she made a false statement.

- The victim's dependence on that statement.
- Resultant damages.

According to Snyman (1987:16), the purpose of punishment, in terms of preventive theory in criminal law, is to prevent the recurrence of crime. This means that the committing of a crime, such as fraud, is punishable by law in order to prevent future crimes. The punishment that is imposed on an accused by a court of law serves to act as a deterrent for similar future acts by the same accused and society in general. Understanding the origins and elements of a crime is regarded as relevant to the study of employee fraud and prevention strategies at universities in KwaZulu-Natal in particular and in South Africa in general.

2.2.8 Evolution of Fraud Theory

According to Dorminey *et al.* (2012:556), fraud has been in existence for the past thousands of years when commerce first came into existence. These authors aver that dishonest traders may have existed when people began to trade with other people a few thousand years ago, resulting in the implementation of a system to enable the identification of trustworthy traders during that era. Dorminey *et al.* (2012:556) hold that the past six decades have seen an evolution in the fraud theories that were developed. The newer theories have made a distinction between fraud and other financially motivated crimes, such as burglary and theft. According to Dorminey *et al.* (2012:560), fraud has become more complex in recent times, with fraudsters using creative ways in which to commit, conceal and convert fraud. This suggests that strategies to prevent employee fraud at universities in KwaZulu-Natal in particular and South Africa in general should evolve in order to adequately combat fraudulent schemes that continually mutate.

2.2.9 Fraud during the 18th and 19th Centuries

Cesare Lombroso was an Italian medical doctor and criminologist during the nineteenth century. His book entitled "*Criminal Man*", which he wrote during 1898, was translated by Gibson and Rafter (2006:1) from Italian into English. Gibson and Rafter (2006:1) describe Lombroso's theory of *delinquent nato*, meaning a person who is a born criminal, or the theory of atavism. According to the Merriam-Webster Dictionary (2014), atavism is defined as "*recurrence in an organism of a trait or character typical of an ancestral form and usually due to genetic recombination*". Lombroso described these "*born criminals*" as people who were dangerous and had identifiable "*anomalies*" such as physical or psychological abnormalities.

According to Gibson and Rafter (2006:1), Lombroso believed these abnormalities were similar to ancient man and animals. Lombroso associated white men with being civilised and conversely associated black, brown and yellow men with having their origins in “*primitive*” or “*savage*” communities (Gibson and Rafter, 2006:17). The theory suggested that criminals genetically inherited their traits from their ancestors. This section has particular relevance to employee fraud and prevention strategies at universities in KwaZulu-Natal.

2.2.9.1 Circumstances Leading to Fraud

In relation to fraud, Gibson and Rafter (2006:18) explain Lombroso’s view that Jews were more prone to commit fraud and receive stolen property than others. According to Lombroso, the Jews were placed in this situation because most nations in Europe prohibited them from occupying any professions except in “*peddling and commerce*”. He further added that atavism was not innate to the character of Jewish people because they moved into other noble professions very quickly, once they were granted equal opportunities by their fellow Christian citizens. This suggested that the circumstances and environment in which people found themselves determined whether they would commit fraud or not, not just their genetic makeup.

2.2.9.2 Origins of Fraudulent Behaviour

According to Taylor (2013:1), fraud has been a crime in Britain since at least 1757. Frauds related to companies were criminalised in Britain in the nineteenth century between 1820 and 1830. Taylor (2013:15) showed that during this period, the attitude of governments towards fraud was one of “*toleration*”. On the one hand, governments were of the view that prevention and punishment for fraud were not their responsibility. On the other hand, judges and magistrates, during that period, chastised greedy investors rather than company directors who committed fraud. Taylor (2013:15) holds that during the period 1840 to 1860, the focus was on “*criminalisation*” of acts, by defining and prohibiting fraudulent conduct linked to the management of a company. This section has particular relevance to employee fraud and prevention strategies at universities in KwaZulu-Natal.

Victims of fraud were tasked with the responsibility to prosecute the perpetrators of fraud. In such instances, the judges read the legislation in a narrow manner, resulting in poor success in prosecutions for the victims. According to Taylor (2013:15), the period 1870 to 1900 saw the

emergence of a prominent role being played by governments in respect of the “*enforcement*” of laws.

Judges adopted a firmer stance against perpetrators in the “*boardroom*”. The stance of governments and the judiciary towards fraud improved during the entire twentieth century, with continuous amendment and refinement to legislation and enforcement. This indicates that certain international trends can be universally applied to universities in particular and in South Africa generally.

2.2.10 Fraud during the 20th Century

A different approach to that described above was subsequently required to explain criminal behaviour in a more acceptable manner. Sutherland (1940:2) explained that white collar crimes are found in every different type of occupation. The financial losses arising out of white collar crime are substantial, including the damage to social relations as it violates the trust between employer and employee. Sutherland (1940:10) asserts that white collar criminality is learned either directly or indirectly from the behaviour of other criminals. Such individuals, who learn how to commit crime, are isolated from constant exposure to the law-abiding conduct of others. In order to explain this theory, it could be associated with the saying “*birds of a feather flock together*”. Slezak (2013:21) equates this theory to the warning parents give to their growing children not to associate with friends who are trouble-makers. The intention of the parent is to dissuade the child from also getting into trouble, due to their association with trouble-makers. Sutherland’s theory was called “*differential association*”, advocating that criminal behaviour is learned from one’s exposure to people with whom they associate. The suggestion is that associating with criminals would result in honest people turning into criminals themselves.

Cressey (1973:742), who was Sutherland’s student at the time, undertook research to understand why employees surrendered to temptation to commit fraud against their employers. He called them “*trust violators*” because they violated the trust of their employers. This section has particular relevance to employee fraud and prevention strategies at universities in KwaZulu-Natal. A total of 250 incarcerated “*trust violators*” were interviewed as part of the study. Arising from the study, Cressey (1973:741) found that there were three factors that were present which gave rise to the violation of trust and which resulted in fraud. They were: a non-

shareable financial problem (pressure), an opportunity to commit the crime and the rationalisation by the “*trust violator*”. In recent years, these factors became known as the fraud triangle (Wells, 2013:8), incorporating pressure, opportunity and rationalisation. According to Comer (1977:9), organisations have the capacity to influence the motivation of an employee who is intent on committing fraud. Comer (1977:13) asserts that a potential fraudster will only exploit an opportunity to commit fraud if he/she has the perception that the likelihood of being detected is very low.

2.2.10.1 Surveys Conducted during the 20th Century

According to Wells (2013:6), it was Edwin Sutherland, a criminologist, who researched fraud committed by business executives against shareholders and the public. It was this pioneering work, according to Wells (2013:6), which resulted in Sutherland coining the phrase “*white collar crime*” in the year 1939. According to Kranacher (2010:60), white collar crime is being used as a nomenclature when referring to economic crimes, including employee fraud.

The Association of Certified Fraud Examiners (ACFE) conducted a biennial survey during 1996, where the objective was to establish the status of fraud and white collar crime in the United States of America (USA). The ACFE Report to the Nation (1996:3) found that employees who committed fraud against their employers ranged from junior employees and managers through to executives of various organisations. The survey found that the most common category of violations were asset misappropriation, corruption, false statements, false overtime, theft, use of company resources for personal benefit, payroll and sick leave abuses (ACFE, 1996:3). The survey also found that financial losses arising out of fraud committed by managers and executives were sixteen times higher than fraud committed by junior level employees. The report concluded by recommending the following:

- Consult a Certified Fraud Examiner (CFE);
- Management should set the tone at the top;
- Provide a code of ethics for employees;
- Check the references of potential employees;
- Scrutinise the bank statements of the organisation;
- Institute a fraud hotline for receiving anonymous tip offs, and
- Motivate staff by providing a good work environment.

In this research and explained later, it can be inferred that preventing unethical behaviour of employees at universities in KwaZulu-Natal, compels the inclusion of an ethical component as part of regular training sessions for employees.

The biennial ACFE Report to the Nation (2004) in the USA, *inter alia*, found that:

- Organisations suffered losses in excess of \$761 million (R9 132 billion) due to employee fraud;
- Employee frauds were mostly detected through a tip off rather than through internal or external audits or internal controls;
- The provision of anonymous fraud hotlines assist in fraud reduction, and should also be made accessible to third parties such as suppliers;
- There is a need for robust internal controls;
- Preventing fraud is cost effective, and
- On average, the victim organisations recovered only 20% of their loss.

The above information can be extrapolated relevant to employee fraud and prevention strategies at universities in KwaZulu-Natal. A common recommendation in both these reports by the ACFE, in 1996 and 2004, were the implementation of an anonymous fraud hotline as a means of detecting fraud.

2.2.10.2 Current Nature of Employee Fraud

According to Johnson and Rudesill (2001:57), employee fraud involves a three-step process: the fraudulent act, the conversion of the act and the concealment thereof. The unlawful act is the crime of fraud. The conversion is the misrepresentation that is perpetrated. The fraudulent act is concealed so that the truth is not exposed. They assert that the use of computer technology has enhanced business opportunities. In so doing, computers have exposed organisations to increased risk of fraud. Computers have thus created more opportunities for fraud to be perpetrated (Johnson and Rudesill, 2001:58). As enablers for organisations to successfully and sustainably operate, computers have brought about their own challenges to organisations in the form of fraud risks. According to Johnson and Rudesill (2001:58), computers provide more opportunities for employees to use as a tool to commit fraud.

Albrecht *et al.* (2006:10) classify fraud into two categories. Firstly, there is fraud committed by employees against their employers. Secondly, there is fraud that is committed on behalf of

one's employer. In this study, the focus is on fraud committed against the organisation by employees. For purposes of clarity, fraud committed by employees on behalf of their employers can be explained as falsification of the financial results of an organisation. The motive here may be the enhanced payment of bonuses that employees would receive to the prejudice of shareholders due to inaccurate listing of share or stock prices.

Occupational (employee) fraud is the use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organisation's resources or assets (Wells, 2013:2). This definition encompasses all levels of employees, from executives to the lowest ranking employees. According to Wells (2013:2), the employee carries out the fraudulent act secretly. This act is carried out contrary to her fiduciary duties. The result is that the employee unduly derives direct or indirect financial benefit from the act. The victim is the organisation that suffers a loss due to the fraud. This view is echoed in the ACFE Report to the Nation (1996:3).

The negative impact of employee fraud on organisations, which prompted this study, is of grave concern. From a preventative perspective, more effort is required in averting fraud from taking place rather than reacting to fraud that has already occurred and handling the losses suffered.

2.2.10.3 Fraud Prevention

The Greek Empire, according to Bakewell (2007:126), implemented measures to prevent fraud during the year 425. A body of citizens was constituted to prevent dishonest practices such as fraud and the trade of goods that were not in a suitable condition. The measures were implemented due to the emergence of fraud related to trading in counterfeit and poor quality gold and silver coins, as well as other precious metals in Athens.

2.2.10.4 Origins of Fraud Prevention

During the eighteenth century, Blackstone (1753:381) also made reference to the prevention of fraud. In this instance, reference was made to a situation where the husband bequeaths to his wife a part of land belonging to his father, who is still alive. The law required that this transaction be made "*in facie ecclesiae, et ad ostium ecclesiae; non enim valent facta in lecto mortali, nec in camera, aut alibi ubi clandestina fuere conjugia*", meaning it had to be made

“in the face of the assembly, and at the church door; for it is not worth to take place in the bed of death, neither have entered into the camera, or in other places where clandestine marriages were”. The purpose of this requirement in law at the time was to prevent fraud involving the bequeathing of land to a beneficiary. Transparency was the key element in these situations in order to prevent fraud.

According to Lee (1971:151), the segregation of duties, as a control measure, was in existence during 3600 to 3200 B.C. The managers at the time sought to separate accounting duties, for example. Lee (1971:153) holds that another form of control implemented by the Greeks and Romans during the period 500 B.C. was the widespread use of auditors (*arbiters*) to scrutinise the accounts of public officials when their terms of office culminated. According to Lee (1971:154), the period 1100 to 1200 A.D. saw the introduction of a “*tally stick*” as a control measure, which served the purpose of a receipt. Notches were cut out on the wooden tally stick to indicate how much money was received or owed. The tally stick was split into two halves; one half was retained by each of the two parties. One of the purposes of this control was to prevent fraud and error. The control measure used in England during the period 1100 to 1135 A.D., was the “*Pipe Roll*” (Lee, 1971:154). The Pipe Roll was used to record the revenues that were due to the monarchy, the revenues actually collected and the expenditure incurred in collecting the revenues.

2.2.10.5 Fraud Prevention Strategies

According to Irvine (2001:344), the principles of modern day common law in England were tweaked to incorporate fraud prevention as a consideration in the overall business strategy. For example, if it was found that shareholders had created a company with the intention to commit fraud, they would be held liable in their personal capacities for the debts incurred by the company. The risk of being held personally liable for company debts due to fraud served as a measure to prevent fraud from occurring in the first place.

Wells (2013:7), in considering Sutherland’s (1940:10) theory of differential association, asserts that although dishonest employees will negatively influence honest employees, the converse is also true. Honest employees will influence their dishonest colleagues against committing fraud. This theory should be considered when providing regular fraud awareness training to employees as a means of fraud prevention. It suggests that honest employees could justifiably

be regarded as the eyes and ears of an organisation. They should be appropriately trained to identify fraud or their suspicion of fraud in the workplace and encouraged to report it to the relevant authorities. Such training should be provided to all employees and not only to employees who are perceived to be honest.

The prevention of fraud is essential to the viability of an organisation. Fraud results in financial loss to organisations. This has a direct impact on the bottom line of an organisation. Comer (1977:305) holds that an organisation cannot remove all opportunities that enable fraud to be committed because internal controls require funds for implementation. Coenen (2008:148) concurs that designing, implementing and maintaining adequate and effective internal controls can be costly to an organisation. A weakness in the internal control environment does not necessarily provide an automatic opportunity for fraud to be perpetrated. In order to prevent fraud, organisations should implement adequate measures that prevent or detect fraud. If these counter-measures are communicated to all employees, it will convey a message that employees who commit fraud will be caught out. According to Comer (1977:306), the risk that the fraud will be detected has a deterrent effect on would-be fraudsters. The risk of being detected poses a risk to criminals but it does not inhibit law-abiding employees from doing their job (Comer, 1977:306).

Krummeck (2000:269) explains that law-abiding employees are expected to report fraud to the relevant authorities within the organisation because it is the correct thing to do. Fraud prevention, according to Krummeck (2000:269), is not the responsibility of any single department but rather that of all employees in the organisation. This section is of particular relevance to employee fraud and prevention strategies at universities in KwaZulu-Natal.

2.3 SUMMARY

This chapter provided an overview of the causal factors of fraud and fraud prevention. Fraud has been in existence since 27 B.C. Roman-Dutch law was introduced to South Africa in 1652 when the Dutch settlers arrived in the Cape of Good Hope. The authorities at the time identified that people were fallible and could succumb to the temptation of fraud. The existence of fraud during the period 3600 to 3200 B.C. necessitated the implementation of control mechanisms to prevent fraud at that point in time. Such control mechanisms have evolved over time to keep pace with changes in the business environment. Just as business

processes have evolved, it is essential for fraud prevention techniques and methodologies to keep pace with the continuing change in the work environment, which is a focus of this study. Fraud has been in existence for millennia. The only difference is that the perpetration of fraud has become more sophisticated over time. The hallmarks of fraud are misrepresentation and prejudice. Fraud cannot take place through negligence on the part of the fraudster. The law requires that the fraudster should have intended to commit the fraud. There are three simple steps that a fraudster follows to commit fraud; the act, conversion and concealment. The designing and implementation of adequate and effective internal controls alone are insufficient to prevent fraud.

In the following chapter, the research further explores understanding of employee fraud and how it can be prevented. In addition, the role of internal controls and corporate governance in fraud prevention is elaborated on in the following chapter.

CHAPTER THREE

THEORETICAL AND PRACTICAL PERSPECTIVES OF EMPLOYEE FRAUD

3.1 INTRODUCTION

This chapter focuses on three essential aspects of employee fraud. Firstly, as explained briefly in the previous chapter, Cressey's (1973:741) theory about trust violators is further analysed and explained. The model, attributed to Cressey, is a founding model that is referred to as the fraud triangle. It is used to facilitate understanding of why employees commit fraud. The three elements of the fraud triangle, pressure, opportunity and rationalisation, are analysed and explained. Secondly, this chapter analyses another relevant model referred to as the fraud diamond model, by Wolfe and Hermanson (2004:38). The fraud diamond model builds on Cressey's fraud triangle model by adding a fourth element of capability. Lastly, various surveys have been carried out by reputable global forensic auditing companies and the Association of Certified Fraud Examiners (ACFE) pertaining to employee fraud. In this chapter, a review of the results of those surveys is presented, *inter alia*, in order to analyse and conceptualise the nature and extent of employee fraud, who the fraudsters are, their respective *modi operandi* and their motives.

3.2 EMPLOYEE FRAUD THEORY

According to the ACFE (2014:6) there is a common misconception among many organisations that fraud does not occur within their organisations. Organisations do not believe that their employees would commit fraud against them. KPMG (2011:4) found that senior managers within an organisation are more likely to commit fraud against their employer than other levels of employees. According to Simuyemba (2012:1), the element of entitlement involves people holding the view that those in charge owe them something. Simuyemba (2012:1) cites the example of an employee who expects to be promoted based on the fact of long service in the organisation. The entitlement mentality may not justify the notion that the world owes anybody anything. The reality is that employee fraud is on the increase, causing financial losses to employers. The ACFE (2014:8) reported in its global fraud study that an estimated \$3.7 trillion (R44.4 trillion) loss is attributable to employee fraud. The study was premised on 1483 cases of occupational (employee) fraud globally. This is the formal estimation. The informal reality may be substantially more. The ACFE (2014:4) postulate in its report that employee fraud

comprises three types of fraud: asset misappropriation, corruption and financial statement fraud. These types of employee fraud are explained in more detail later in this chapter when the nature of employee fraud is explored. In order to understand what fraud is, one has to establish what elements constitute fraud.

3.2.1 Elements Constituting Fraud

According to Snyman (1987:457), the legal definition of the crime of fraud requires four essential elements to be present in order for it to constitute a crime. The four elements that define fraud are briefly described below in order to provide an understanding of what fraud is.

3.2.1.1 Misrepresentation

Snyman (1987:457) holds that the act by the employee has to involve a distortion or perversion of the truth, commonly referred to as a misrepresentation. The employee has to represent to the employer the existence of certain facts while knowing in his/her mind that these facts do not exist. The employer accepts this representation at the time in good faith on the understanding that the employee will honour his/her commitment. The misrepresentation may be made in writing, verbally or by means of a physical gesture, such as nodding of one's head. The misrepresentation could be made explicitly or implicitly. It could be made by an omission of relevant facts. For example, had the victim been made aware of this particular essential fact, he would not have acted to his detriment. By implication, this means that an employee who withholds vital information can be regarded as making a misrepresentation to the employer, which results in prejudice.

3.2.1.2 Prejudice

The element of prejudice could be in the form of actual or potential prejudice to the victim. According to Snyman (1987:459), the potential that the victim is being prejudiced is sufficient in law. In other words, it is not a prerequisite in law for the victim to suffer actual prejudice. It is of no consequence that the fraudulent act was unsuccessful because of it being detected during its commission. It is the "intent" that is the key here ("*mala fide*", "*dolusmalus*", "*falsum*" and "*stellionatus*"). Whether the victim suffered a loss, or not, is irrelevant, as Snyman expounds (1987:460). The prejudice may be in the form of a financial or proprietary nature.

3.2.1.3 Unlawfulness

The act has to be unlawful. The perpetrator cannot rely on a defence that he/she did not know that the act of misrepresentation was unlawful. Snyman (1987:172) is of the view that the fraudster has to, in principle, know that his/her conduct is forbidden in law. The fraudster may raise the grounds of justification that he/she was acting upon an order or compulsion. Snyman (1987:462) found that the court refused to accept the ground of justification that the accused had acted unlawfully on instruction from his employer when fraud was committed, in the case of Shepard 1967 (4) SA 170 (W) 177-178.

3.2.1.4 Intention

Intention is an essential element that makes up the crime of fraud. The accused should have intended to commit the crime. One cannot negligently commit fraud. According to Snyman (1987:462), the accused should have been aware that he/she was making a false representation at the time. In terms of Section 245 of the Criminal Procedure Act 51 of 1977, an accused on trial for fraud will be deemed to have made the representation while knowing it to have been false, if such is proved in court. The onus rests on the accused to prove otherwise.

There has to be the presence of all four elements in order for the act to be deemed fraud. The Criminal Procedure Act 51 of 1977 currently lists fraud as a crime which is punishable by the State.

The question often asked by employers is “*why did my employee do it?*”. In attempting to understand this phenomenon, criminologist Donald Cressey (1973:30) suggests that trusted persons violate trust when they have a financial difficulty and are able to conceal their fraudulent conduct and rationalise to themselves that they are entitled to use the funds. According to Simuyemba (2012:1), this involves employees who have an entitlement mentality. Cressey identifies three factors which facilitate the perpetration of fraud. The factors are pressure (incentive), opportunity and rationalisation. He argues that the fraudster has to be under some pressure to commit the fraud, such as having a gambling habit, drug abuse or greed. Secondly, there has to be a lack of, or weak internal financial controls, which the fraudster exploits in order to create the opportunity to commit and conceal the fraud. Thirdly, fraudsters justify the fraudulent act by convincing themselves that they will repay the money,

or that the money is due to them, for example, by being overlooked for promotion (Cressey, 1973:30).

Wolfe and Hermanson (2004:38) expanded the fraud triangle model and created the “*Fraud Diamond Model*” by adding a fourth factor. This was the factor of capability. They assert that the individual has to have certain observable traits, for example, the personality, to commit fraud. They postulate that some capability traits are holding an authoritative position, having the capacity to exploit deficient internal controls, being confident of not being caught or having the ability to explain away the fraud and lastly, the ability to deal with the stress of committing fraud. Both the fraud triangle and fraud diamond models are deliberated on below in separate sections of this chapter.

Regular global fraud surveys are conducted by various forensic auditing companies including KPMG, PwC and Deloitte; as well as the ACFE. The objective of these surveys is to provide insight into the nature and extent of employee fraud and how these could be detected and prevented.

PwC (2011:18) found that a total of 56% of perpetrators of fraud were employees of a company. It is evident from this study that the risk of fraud emanates largely from within a company’s own ranks. In view of this finding, this study focused on higher education institutions that were victims of employee fraud, in order to explore the *modi operandi* used and motives of employees to commit and conceal the fraud. Organisations can prevent fraud from occurring if they are aware what fraud is, who commits it, why and how it is committed and how it is concealed. The ACFE (2012:5) found that the longer a fraudster was employed within an organisation, the greater the value of the loss. This situation is exacerbated when two or more employees collude with each other to defraud their employer. The ACFE (2012:43) asserts that collusion between employees to commit fraud results in greater financial losses than fraudsters working on their own. Fraud involving collusion amongst employees is also difficult to detect as they have the ability to circumvent internal controls and conceal their fraudulent conduct. Considering that preventative internal controls, according to KPMG (2006:8), are designed to assist in the reduction of the risk of fraud, these internal controls are arguably ineffective when employees collude to commit fraud and circumvent these preventive internal controls.

Albrecht and Schmoltdt (1988:16) explain that dishonesty and compromised integrity are prevalent in society. The reasons why employees commit fraud against their employers have to be considered. According to Jones and Jing (2011:859), experts agree that the motive for committing fraud is greed for money. Wells (2001:89) concurs that the motive to commit fraud is greed. Albrecht and Schmoltdt (1988:111) caution that trustworthy employees are not a control measure. Albrecht and Schmoltdt (1988:113) are also of the view that employees commit fraud due to three inclusive factors, namely, pressure, opportunity and rationalisation. These three factors form the fraud triangle, as explained earlier in this chapter. Thus, understanding the motive and *modi operandi* of fraudsters will be helpful to organisations in their quest to address the occurrence and impact of employee fraud.

Peterson and Zikmund (2004:30) suggest that employees would be less likely to commit fraud if they were aware that they could get caught; they recommend implementing robust internal controls, the presence of internal auditors, conducting fraud risk assessments, implementation of a fraud hotline and awareness training programmes to staff about fraud risks. Management needs to set a sound ethical tone at the top and lead by example in order to win the hearts and minds of employees in the fight against employee fraud. While incidents of fraud are escalating within South Africa, so too is the cost of the loss to the victim organisations. It is of concern that fraud remains pervasive. Perhaps the assertion by Larson (2006:16), that there is a scarcity of skilled forensic accountants, is indeed a shortcoming in fraud prevention and detection.

It is also likely that employees are aware that they will not be caught out as their organisations lack the relevant skills and expertise to unearth fraudulent conduct. Larson (2006:16) avers that little is being done by tertiary institutions to incorporate forensic accounting concepts into their curricula in order to provide undergraduates with fraud prevention skills. The gap in the curricula of universities could possibly be addressed by creating a partnership between universities and the ACFE. The ACFE (2014) provides an “*Anti-Fraud Education Partnership*” initiative between itself and universities, whereby the ACFE provides the required resources for the fraud examination course to universities at no cost. The ACFE suggests that this fraud examination course be integrated into the applicable mainstream degree courses offered by universities.

Apart from the actual loss, organisations incur financial costs to have fraud cases investigated and to recover their losses. Laufer (2011:402) argues that a victim organisation may be further prejudiced due to legal costs, negative publicity and poor staff morale resulting from the fraud committed by an employee. Organisations undoubtedly have to spend additional funds for legal fees and costs to institute formal disciplinary procedures against the implicated employee, over and above the direct loss arising from the misappropriated funds.

The Prevention and Combating of Corrupt Activities Act 12 of 2004 was promulgated because the illegal obtaining of personal wealth is considered to be harmful to organisations, the economy, ethical values and the rule of law. Section 34 of this Act also places the onus on persons who are in positions of authority, to report corrupt transactions, *inter alia*, the offence of fraud involving an amount of R100 000 or more, to any police official. In its attempt to combat fraud and corruption, the government has made management personnel accountable should they not report such cases to the SAPS. The intention of the legislature is to eradicate employee fraud with the assistance of management and the public. Section 29 (1) of the Higher Education Act 101 of 1997 stipulates that a university council should establish committees who will have the delegated authority to carry out certain duties on its behalf. One such committee which is tasked with oversight of audit and risk at a university, is the audit and risk committee (UKZN, 2014:23). According to COSO (2013:148), the role of the audit and risk committee is, *inter alia*, to ensure oversight over the implementation of adequate and effective systems of internal control to mitigate all risks, including fraud risks by management. Both these Acts should be considered when addressing employee fraud and prevention strategies at universities in KwaZulu-Natal.

In this chapter an analysis is presented of various global fraud surveys that have been conducted by forensic auditing companies such as KPMG and PwC, as well as the ACFE. Hereunder, the factors of pressure, opportunity and rationalisation are explained in order to obtain enhanced insight into the fraud triangle explained below.

3.3 FRAUD TRIANGLE MODEL

According to Wells (2001:89), there are three factors that contribute to the perpetration of employee (occupational) fraud. These three factors make up what is known as the fraud triangle. The elements that constitute the fraud triangle are pressure, opportunity and

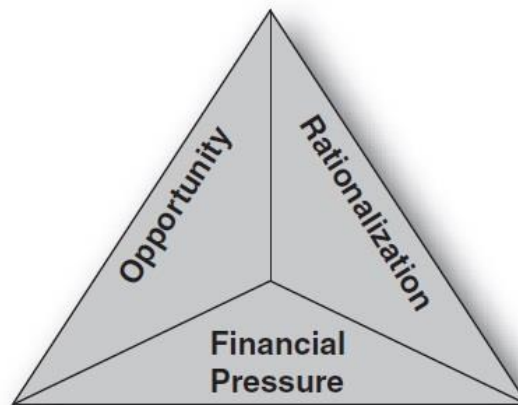
rationalisation. According to Wells (2013:8), this model emanated from a hypothesis that was created by Cressey (1973:30).

The three constructs mentioned above (pressure, opportunity and rationalisation) were utilised in Cressey's study (Cressey, 1973:30) to establish the causes of employee fraud. These constructs, which are explained in in this chapter, provided an understanding of the root causes that lead to employees committing fraud against their employers.

Cressey's hypothesis (1973:30) is that persons on whom trust is bestowed, could breach that trust when faced with a financial difficulty. These so-called "*trust violators*", as Cressey refers to them, are able to hide their fraudulent conduct and justify to themselves that the stolen funds were due to them in some way. According to Simuyemba (2012:1), this type of justification is premised on an entitlement mentality. The fraud triangle is cited globally as a recognised model in understanding the behaviour of fraudsters.

The fraud triangle model is depicted in Figure 3.1 below:

Figure 3.1: Fraud Triangle



Source: Wells (1997:45)

The three elements of the fraud triangle are referred to by the American Institute of Certified Public Accountants (AICPA; 2002:1722), through its Auditing Standards Board, which issued the Statement on Auditing Standards number 99. SAS 99 (as it is commonly referred to), deals with considering fraud when conducting an audit of financial statements. It stipulates that auditors should consider the pressure, opportunity and rationalisation of employees to commit fraud when auditing financial statements of organisations.

Although various researchers have in recent years modified and adapted the fraud triangle model, Coenen (2008:10) holds that it continues to be a popular model to provide improved understanding of fraud. The three factors of pressure, opportunity and rationalisation, which make up the fraud triangle, arise out of various types of circumstances that lend themselves to committing fraud. Albrecht *et al.* (2006:32) liken fraud to fire. Fire also requires three essential elements to be simultaneously present for it to ignite: fuel, oxygen and heat. Fire fighters bring fires under control by removing any one element. For example, the fire is doused with chemicals to prevent the supply of oxygen, heat is terminated with water and fuel is removed by building fire breaks. The circumstances that fraudsters rely on to commit fraud are elaborated on in detail below under each of the three factors. This section is particularly relevant to employee fraud and prevention strategies at universities in KwaZulu-Natal.

3.3.1 Pressure

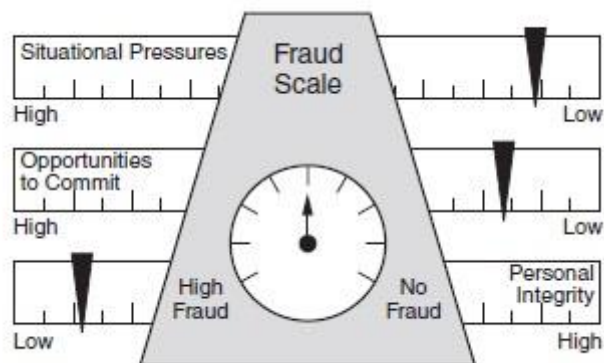
The pressure or motivation to commit fraud forms the first of three parts of the fraud triangle. Pressure manifests itself in the form of personal financial pressure facing the employee that motivates the employee to commit fraud. According to Cressey (1973:30), the source of pressure is usually a financial difficulty facing the person. The ACFE (2014:59) state in their Report to the Nations that 44% of fraudsters displayed behaviour that indicated that they were living beyond their means before the fraud was discovered. In other words, these persons were living a lifestyle that they were unable to afford or sustain. The ACFE (2014:59) also found that 33% of fraudsters were experiencing financial difficulties that were known to others. Coenen (2008:10) refers to the element of pressure as “*motivation*”. In essence pressure or motivation has to do with the reason why a person commits fraud. The pressure experienced by an employee to commit fraud could emanate either from work or personal life. Universities in KwaZulu-Natal should be cognisant of the types of pressure that employees encounter in order to address exposure of the universities to employee fraud.

Albrecht *et al.* (2006:33) describe four different types of pressures. They are financial, vice, work-related or other types of pressures. According to Albrecht *et al.* (2006:33), most frauds relate to financial or vice pressures, which involve approximately 95 percent of cases. The vice-related pressure is generally attributed to drug, alcohol or gambling addiction. Work-related pressure could be an employee who is disenchanted at being overlooked for promotion and commits the fraud to get even with the employer. Other pressures could emanate from

wanting to please another person such as a spouse, by buying them expensive gifts. According to Albrecht *et al.* (2006:33), financial pressure can emanate from greed, living a lifestyle that is unaffordable, incurring a personal financial loss or unplanned financial need.

Albrecht *et al.* (2006:36) found that most people face different types of pressure in their daily lives, but not everyone is susceptible to committing fraud. They hold the view, however, that a person of sound integrity, with a limited opportunity to commit fraud, will commit fraud if the pressure is excessive. The authors do not provide any examples of instances where this view is supported. Although Albrecht *et al.* (2006:36) postulate that the removal of pressure will ensure that fraud seldom occurs, this is perhaps not easily achieved. An employer, for example, can have little impact on an employee whose motive is greed or whose pressure is to get even with their employer. Albrecht *et al.* (2006:33) explain the fraud triangle by means of the “*Fraud Scale*”, which is depicted in Figure 3.2 below. The element of personal integrity has an impact on the rationalisation to commit fraud. If the situational pressures and opportunities to commit fraud are low, fraud would not occur when combined with high personal integrity. Employees with high personal integrity would not rationalise their criminal conduct to justify its commission.

Figure 3.2: Fraud Scale



Source: Albrecht *et al.* (2006:33)

The results of a fraud survey carried out by Deloitte in the United Kingdom (2012:9) revealed that 43% of cases involved external pressure that motivated the employee to commit fraud. According to the results of the KPMG (2013:13) global fraud survey, the motives of the fraudsters were personal financial gain, at 47%, followed by greed at 42%. In instances where employees benefit from fraud, based on their motivation (pressure) of greed or personal gain, it is essential for organisations to ensure that their internal control environment is adequately

robust to prevent the risk of fraud by their employees. Opportunities that could be exploited by fraudsters to commit fraud should be minimised.

3.3.2 Opportunity

Opportunity to commit fraud constitutes the second element of the fraud triangle. An employee exploits an opportunity, such as a weak internal control, to commit and conceal the fraud. An employee who is intent on committing fraud either exploits an existing opportunity in the internal control environment or, if there is no available opportunity, creates one to complete the crime. According to Coenen (2008:12), an opportunity to commit fraud relies on the fraudster's ability to access people and resources within the organisation. These resources are used to commit and conceal the fraud.

Albrecht *et al.* (2006:37) refer to one control and five non-control elements that significantly contribute towards providing an opportunity for fraud to occur. The control element is:

- Deficient controls or circumvention of controls.

The five non-control elements are:

- Unverifiable quality of goods or services is evident;
- No appropriate disciplinary sanction is taken against employee for committing fraud;
- Access to information by management is deficient;
- Management is ignorant, apathetic and lacks capacity in terms of fraud, and
- Non-existent audit trails are evident.

When these six elements are appropriately addressed, it may limit the opportunity to commit fraud. In addressing the control and non-control elements, in order to reduce the opportunity to commit fraud, Albrecht *et al.* (2006:37) provide detailed examples and suggestions for the adequate and effective implementation of these six elements. The elements of internal control are explained in detail in Chapter Five.

Albrecht *et al.* (2006:37) draw attention to the fact that most fraud prevention initiatives are focused on eliminating the opportunity to commit fraud, at the expense of the other two elements of the fraud triangle, namely, pressure and rationalisation. They assert that fraud

fighters are focusing on implementing internal controls and monitoring compliance to such controls. The issues of pressure and rationalisation are being ignored. They postulate that the decreasing levels of honesty in developed countries indicate that employees will continue to commit fraud as they rationalise their conduct, and require fewer opportunities or pressure.

According to Maher (2013:1), an experiment was conducted by the magazine Reader's Digest in 16 cities around the world. The experiment involved dropping purses that contained local currency of the relevant cities to the value of \$50, in parks, shopping malls and sidewalks. The 12 purses that were dropped in each city contained a photograph and a contact telephone number. The result of the experiment was that 47% of those who found the purses returned them to the "owners"; and the remaining 53% kept the purses for themselves. Helsinki in Finland had the most number of honest people, whereas Lisbon in Portugal had the least number of honest people. According to Maher (2013:1), the inference drawn from the study was that honest people could become dishonest based on the circumstances that enable them to be dishonest. A similar experiment could be extrapolated to South Africa to determine, for example, which provinces have citizens that may be susceptible to be dishonest.

3.3.3 Rationalisation

The third element of the fraud triangle, which is rationalisation, poses the highest risk to an organisation, according to Coenen (2008:13). This is because the organisation has little control over employee rationalisation. The fraudster rationalises the wrongful behaviour in his/her mind by, for example, justifying the wrongdoing because he/she was overlooked for promotion at work. Employees rationalise their misconduct in their minds in order to convince themselves that the fraudulent act that they are going to perpetrate is acceptable conduct. They use different scenarios to justify their fraudulent act to themselves. Albrecht *et al.* (2006:51) and Coenen (2008:13) share the view that fraudsters justify their misconduct in their minds by attributing it to a bonus or salary increase that they were entitled to but never received; they are also borrowing the money and will repay the money to the organisation, and moreover, no one will miss the money.

The entitlement mentality as explained by Simuyemba (2012:1), is apt in this instance. Coenen (2008:13) is also of the view that fraudsters rationalise that the organisation brought the fraud upon itself by not implementing stronger controls and monitoring over the funds. Furthermore,

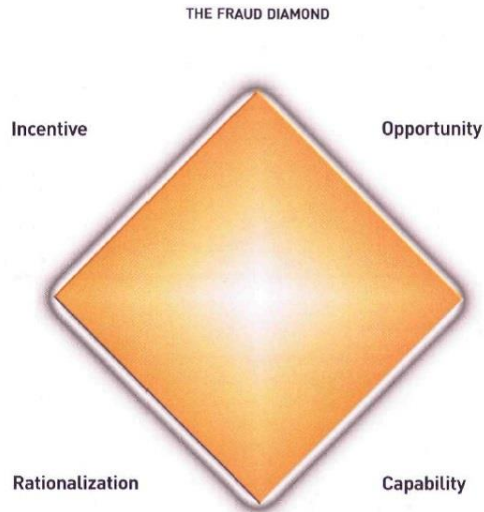
Albrecht *et al.* (2006:51) suggest that fraudsters also use other rationalisations such as the belief that fraud is perpetrated with a good cause in mind; the fraudster will rectify the book entries once the financial pressure is sorted out, and lastly, either the integrity or reputation of the fraudster has to be sacrificed in order to prevent embarrassment to them should the fraud be detected and exposed. Wolfe and Hermanson (2004:38) summarise rationalisation as the “*attitude*” of a fraudster towards his conduct. The Merriam-Webster Dictionary (2014) describes attitude as “*a feeling or way of thinking that affects a person's behaviour*”. The manner in which a person thinks or rationalises his/her intended actions will influence his/her response towards that conduct. The elements of the fraud triangle are of particular relevance when addressing employee fraud and prevention strategies at universities in KwaZulu-Natal.

3.4 FRAUD DIAMOND MODEL

The fraud diamond model was created by Wolfe and Hermanson (2004:38) in pursuit of progressively refining the seminal fraud triangle model. The authors found that the interventions that were implemented to prevent and detect fraud, after the infamous Enron and WorldCom accounting frauds in the United States of America, may perhaps not be adequate to tackle the problem of fraud within organisations. The interventions that were implemented, post the accounting scandals of Enron and WorldCom, included stricter legislation, more robust internal controls, onerous standards and procedures for auditing, as well as wider oversight and ongoing monitoring of transactions and processes. In keeping with the various enhancements in the accounting and auditing fields at the time, the authors proposed an improvement to the fraud triangle.

Wolfe and Hermanson (2004:38) proposed a fourth element in order to improve the detection and prevention of fraud. The addition of the fourth element of “*capability*” resulted in the transformation of the fraud triangle into the fraud diamond, which is depicted in Figure 3.3 below:

Figure 3.3: Fraud Diamond



Source: Wolfe and Hermanson (2004:38)

3.4.1 Capability

Wolfe and Hermanson (2004:38) suggest that frauds, which result in significant losses, are usually committed by “*the right person with the right capabilities*”. The authors hold the view that a person has to have the requisite traits to recognise an opportunity to commit fraud and the capacity to exploit that opportunity, thereby committing the fraudulent act. The other elements of the fraud triangle have to be present as well for fraud to take place.

According to Wolfe and Hermanson (2004:39), there are six types of traits and abilities that are symptomatic of a fraudster’s capability. These employee capabilities are based on the following:

- Position or type of job
- Intelligent and experienced
- Egoist and confident
- Persuasive personality
- Liar
- Handles stress well

The above authors suggest that fraudsters often rely on their position within an organisation to exploit opportunities or to create new opportunities to commit fraud. They are usually highly intelligent people who have substantial experience in their fields of expertise, and they understand the weaknesses within the organisations for which they work. They are confident

and have big egos, which make them believe that they are invincible. These types of people can influence other employees or suppliers to perpetrate and/or conceal the fraud. A fraudster is a good liar who is capable of maintaining a consistent trail of lies aimed at concealing the fraud. Lastly, fraudsters handle stress well because they need to continuously ensure that the fraud remains undetected in order to protect them (Wolfe and Hermanson, 2004:39).

KPMG (2013:7) suggest a differing view, arguing that the element of capability is a sub-category of the element of opportunity because the fraudster has to possess certain personal traits that predispose him/her to exploit existing opportunities to commit fraud. KPMG (2013:5) finds that there are only three elements which drive fraud, based on the fraud triangle. The fourth element of capability, proffered by Wolfe and Hermanson, should be considered as a sub-element of opportunity.

Wolfe and Hermanson (2004:42) identify three steps in attempting to understand the capability of a person to commit fraud. Firstly, they suggest that an assessment is made of the traits and skills of senior executives and other key employees. These could include vetting their background, having discussions with them, observing their behaviour to identify any signs of dishonesty and taking note of what other people say about the behaviour of the person. Secondly, if a person's capability is identified as a risk, then adequate and appropriate internal controls have to be implemented, concurrent with regular auditing of the control environment associated with this person. These interventions have to be based on elements of the fraud diamond, but with specific focus on the capability of these employees to exploit identified opportunities. Lastly, it is suggested that a reassessment is made of the senior executives and key employees as an ongoing process. There is a need to reassess their capabilities as these tend to change as they are promoted in the organisation and gather more knowledge and authority in new positions. This may prompt a review of internal controls and/or the level of oversight over the new activities. According to Wolfe and Hermanson (2004:42), changes in business processes or systems may also warrant relevant review and enhancement of existing internal controls, due to new opportunities being created for employees who have the capability to commit fraud.

The above three steps suggested by Wolfe and Hermanson may not be pragmatic in a real life sense because the proactive vetting and clandestine enquiry processes suggested may not be easily achievable. This is more so when the employee being vetted is a senior manager or

executive director. However, global fraud surveys, such as the survey by the ACFE (2014:40), continuously reflect that these senior levels of management are more prone to commit fraud than other junior levels of employees.

According to Dorminey *et al.* (2011:23), there are two different types of fraudsters. They are “predators” and “accidental fraudsters”. Predator fraudsters could be compared to career-criminals who commit crimes as a way of life. They have a criminal mind-set which is boosted by their arrogance. Predators are well organised, conceal their fraudulent schemes well and are not intimidated by auditors and other internal control interventions. Dorminey *et al.* (2011:23) postulate that a predator does not need pressure or rationalisation to commit fraud. The predator only seeks opportunities to commit fraud because of his/her criminal mind-set. This is unlike the accidental fraudster who requires all three elements of the fraud triangle to commit fraud. Dorminey *et al.* (2011:23) proffer a rival “New Fraud Diamond” model which is depicted in Figure 3.4 below. This “New Fraud Diamond” model reflects the aspects which motivate both types of fraudsters (accidental and predators). According to Dorminey *et al.* (2011:23), the fraud triangle was created with the accidental fraudster in mind because they are law-abiding citizens who would not normally commit fraud.

Dorminey *et al.* (2011:23) found that predator fraudsters actively search for employment where they can commence their fraudulent schemes as soon as they are employed. Accidental fraudsters can eventually become predators if they are not caught out. The common element contained in the New Fraud Diamond model is opportunity. Both the predator and the accidental fraudster have to exploit an opportunity to commit fraud. Figure 3.4 below depicts the common element of opportunity:

Figure 3.4: A New Fraud Diamond emerges with a Common Element



Source: Dorminey *et al.* (2011:23)

The seminal fraud triangle model remains regularly cited by researchers such as Wells (2001:89), Albrecht *et al.* (2006:33) and Coenen (2008:10), who are involved in the study of employee fraud globally. The fraud diamond and the new fraud diamond models seek to enhance the understanding of researchers and other role players in the fields of fraud prevention and detection. Both predators and accidental fraudsters pose a risk to organisations.

The fraud triangle model has evolved into the fraud diamond model, which posits the existence of four elements that a fraudster requires to perpetrate fraud. The fourth element of the fraud diamond model is “*capability*”. Wolfe and Hermanson (2004:38) hold that fraud is committed by a person who has the “*the right capabilities*” to commit fraud. An honest employee who is under financial pressure, who is able to rationalise the unlawful deed, and who has found a weakness (opportunity) in the internal control system would not commit fraud if she/he is a law-abiding citizen. The fraud triangle model does not take into consideration the capability of a potential fraudster. The view of KPMG (2013:7) that the element of capability is a sub-category of the element of opportunity is not supported because Cressey (1973:30) holds that there has to be deficient internal financial controls (opportunity) which the fraudster exploits in order to commit the fraud. A dishonest employee with the capability to commit fraud would take advantage of such an opportunity to commit fraud. An honest employee would not exploit that opportunity to commit fraud. It is essential to understand the element of capability in order to prevent fraud.

The major theoretical stance that underpins this study is based on these four elements of the fraud diamond model, which are pressure, opportunity, rationalisation and capability. The ability to identify fraudsters and how they operate will be of assistance in addressing employee fraud and prevention strategies at universities in KwaZulu-Natal. In this regard, it is imperative that a holistic approach be considered by universities in KwaZulu-Natal.

3.5 NATURE OF EMPLOYEE FRAUD

The ACFE (2012:6) defines employee fraud as committed by a person who uses his/her occupation to enrich himself/herself by misusing the employer’s resources. The ACFE (2014:71) refers to employee fraud as “*occupational fraud*”, which they define as “*the use of one’s occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization’s resources or assets*”. This is supported by Albrecht (1998:110),

who asserts that embezzlement by an employee is an employee who steals company assets. Various studies have found that fraud which is committed by employees against their employers is ubiquitous and escalating. The findings of an international survey on economic crimes, carried out by PwC (2011:18), show that a total of 56% of perpetrators of fraud were employees of a company. Employees committed fraud against their employers. KPMG (2013:2) found in a survey that employees who commit fraud against their employers are mostly members of senior management who are employed in either finance, operations, executive, sales or the marketing functions.

Deck (1985:52) draws attention to the concern about the increase in employee fraud within the private and public sectors, where an employee betrays the trust of a manager in order to commit the fraud. Etheridge (2012:42) is of the view that employee fraud is a worldwide problem. Accordingly, Scott (2001:16), asserts that employee fraud poses the greatest threat to an organisation than any other type of fraud.

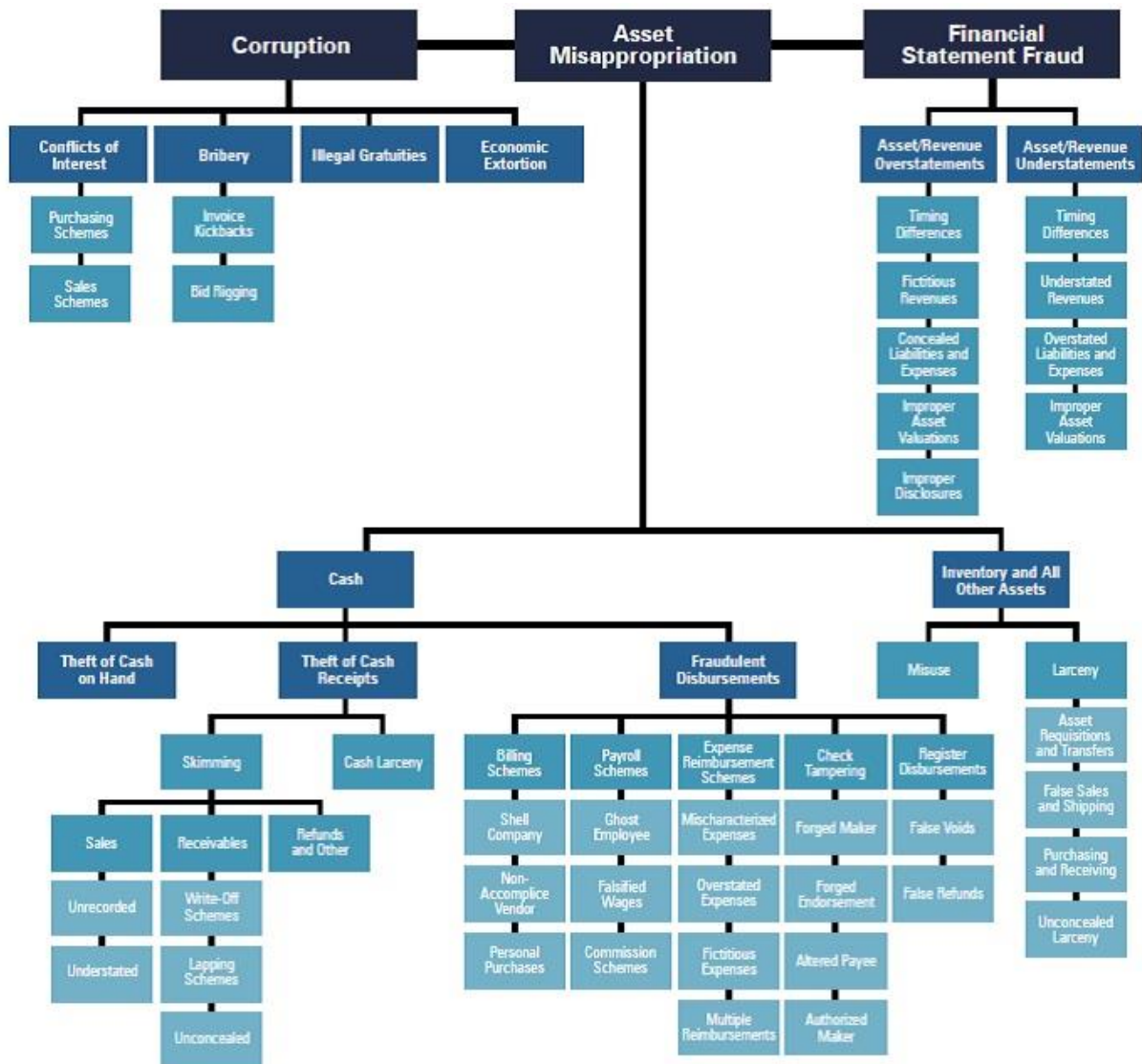
Gill and Wells (2007:64) suggest that training should be provided to all employees about ethics and anti-fraud policies of an organisation. Seidman (2002:423) states that internal controls and audits will not totally eradicate fraud, unless people are virtuous. Employees need to be continually reminded to conduct business in an ethical manner. According to Bryan (2012:21), the tone set at the top, by senior management, is a critical component in preventing fraud committed by employees against their employers. The Committee of Sponsoring Organisations of the Treadway Commission (COSO; 2013:4) asserts that the board of directors and senior management have to set the tone at the top about the importance of internal controls as well as the ethical conduct of employees. Bryan (2012:22) also believes that executive management should bear in mind that every employee has the capability to commit fraud against their employers under certain circumstances.

Managers, leaders and executives have to adopt and constantly create awareness of the code of ethics of their organisation, according to Bryan (2012:22). Executives should lead by example in order to create an ethical culture that pervades the organisation and enables employees to prevent fraud in the workplace (Bryan 2012:22). The Councils of the universities in KwaZulu-Natal together with the relevant executive and senior management should consider the creation and implementation of a code of ethics for university employees. In this regard, an ethical

culture should be set by the leadership of the universities in order to lead by example when addressing employee fraud and prevention strategies at universities in KwaZulu-Natal.

The ACFE (2014:11) depicts the three main categories and sub-categories of employee fraud as a “*Fraud Tree*”. Figure 3.5 below reflects the Fraud Tree, which also briefly depicts how employee fraud is committed in each category and sub-category.

Figure 3.5: ACFE Fraud Tree



Source: ACFE (2014:11)

In the fraud tree, each identified sub-category contains its own inherent risks which have to be mitigated by adequate and appropriate measures aimed at preventing fraud from occurring. As organisations differ in the manner in which they operate, so too do the approaches and interventions that need to be implemented with the objective of preventing employee fraud.

The ACFE (2014:10) found that, despite the global advancements and evolution of technology and the business landscape, fraud schemes maintained a consistent pattern in the manner in which they were committed. Universities in KwaZulu-Natal should consider these consistent fraud patterns when devising strategies to manage fraud risks.

3.6 EXTENT OF EMPLOYEE FRAUD

As explained in Chapter One, the ACFE (2012:8) reported that losses, arising out of employee fraud, are estimated to cost organisations \$3.5 trillion (R42 trillion) globally. This figure has increased to \$3.7 trillion (R44.4 trillion) globally, according to the latest report from the ACFE (2014:4), which conducted its biennial survey (2014:2) involving 1483 cases of employee fraud that were investigated globally by Certified Fraud Examiners (CFE).

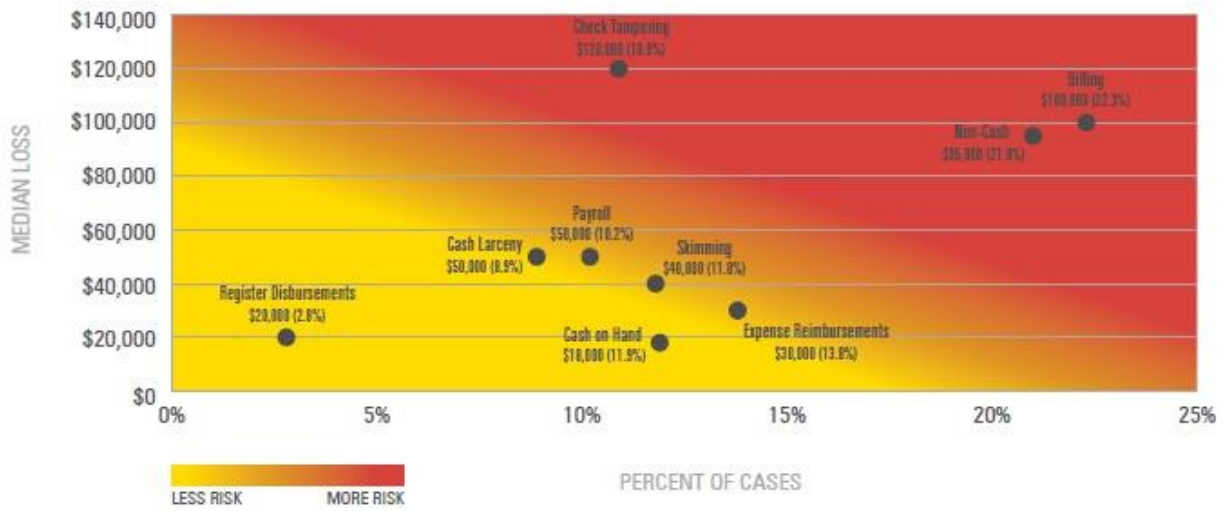
The Report to the Nations by the ACFE (2014:4) reflects the three categories of employee fraud to which organisations fall victim. These are asset misappropriation, corruption and financial statement fraud. The ACFE (2014:71) defines asset misappropriation as employee fraud involving, *inter alia*, theft of cash, processing fake invoices and submitting fraudulent expense claims. Corruption involves the misuse of an employee's influence in their official capacity in order to gain an undue personal benefit from a business transaction; such as bribery. Lastly, financial statement fraud involves an employee making a mis-statement in the financial reports of an organisation or the omission of vital information from such reports, *inter alia*, inflating income, understating expenses, or overstating assets.

Cases involving asset misappropriation were found by the ACFE to be the highest, totalling 85% of all cases reported on. The average loss per case was \$130 000 (R1.5 million). The second highest was corruption, totalling 37% of all cases surveyed, with an average loss per case of \$200 000 (R2.4 million). The lowest was financial statement fraud totalling 9% of cases. According to the ACFE (2014:12), the average loss in this category was \$1 million (R12 million).

An analysis of fraud, categorised as asset misappropriation by the ACFE (2014:13), revealed that cheque tampering, billing as well as non-cash misappropriations, posed the highest risk to organisations based on likelihood and cost of loss.

Figure 3.6 reflects the frequency and median loss due to asset misappropriation sub-schemes:

Figure 3.6: ACFE Frequency and Median Loss of Asset Misappropriation Sub-Schemes



Source: ACFE (2014:13)

As concealment is a cornerstone of employee fraud, numerous fraud schemes are never unearthed or reported. Over and above the actual funds that are stolen, organisations incur other indirect costs such as loss in production, fees to have the fraud investigated and processed through courts of law, and damage to the image and reputation of the organisation. The ACFE (2014:8) suggests that this scenario is comparable to the proverbial iceberg, where the direct loss is clearly visible above the surface but there are other significant hidden costs that are not plainly visible because they lie below the surface. This scenario indicates that fraud is more wide-spread than what is actually known.

PwC (2011:20) conducted its biennial global economic crime survey and found that asset misappropriation accounted for 72% of the cases surveyed; accounting fraud (financial statement fraud) was at 24% and corruption was also at 24% of cases surveyed. PwC reported that asset misappropriation has consistently been the highest type of reported fraud, escalating by 20% since their 2003 global economic crime survey.

The results of the biennial fraud survey conducted by KPMG (2011:16) indicate that the average duration of fraud, before being detected, is 3.4 years. The delay in organisations detecting fraud is directly related to the controls that are implemented coupled by management oversight over these control activities. Deficient controls and lack of management oversight impact the prevention and detection of frauds. These deficiencies provide fertile grounds (opportunities) for dishonest employees to commit fraud without fear of being detected or

being prevented from doing so. The longer the duration of fraud, the higher the escalation of the losses arising out of fraud. This section is clearly relevant to employee fraud and prevention strategies at universities in KwaZulu-Natal.

3.7 MODI OPERANDI OF FRAUDSTERS

According to the Merriam-Webster Dictionary (2014), *modus operandi* is defined as “a distinct pattern or method of operation that indicates or suggests the work of a single criminal in more than one crime”. Horgan (1979:59) holds that the term *modus operandi* is derived from Latin, meaning “operational method of procedure”. It is commonly referred to as method of operation or “M.O.”. The analysis of the *modus operandi* of a criminal is useful to forensic investigators because it enables them to identify the manner in which a specific criminal commits a specific type of crime on a number of occasions. The view of Campbell and DeNevi (2004:15) is that the repeated pattern according to which a crime is committed will assist in establishing the *modus operandi* of the perpetrator, especially if a serial criminal is responsible for the crimes.

Jackson and Bekerian (1997:2) assert that the types of motives and *modi operandi* employed by criminals, in committing crimes, are limited. In addition, they postulate that a crime and the criminal are not unique when viewed as a whole. On the one hand, the limited types of *modi operandi* employed by criminals may create a perception that detecting, investigating or preventing fraud will be an easy task. On the other hand, a fraudster who uses a specific method to commit a crime, cannot automatically be considered to be linked to a particular crime. In other words, profiling an offender based only on their motive and/or *modus operandi*, in order to identify a fraudster, for example, will not be an easy task. This can be largely attributed to the various ways in which criminals commit crimes. Fraud, for example, is perpetrated in various ways.

The ACFE (2014:71) defined the various terms used to describe the various types of fraud schemes falling under asset misappropriation. Table 3.1 below reflects the brief definitions of these terms:

Table 3.1: Definition of Terminology

TERM	DEFINITION
Billing	Employee submits invoices for goods and/or services that were never received, but payment is made. The scheme also involves invoices for the purchase of personal items as well as inflated invoices.
Cash larceny	Employee steals money received on behalf of the organisation after it is recorded in the financial records or banked.
Cash-on-hand misappropriation	Employee steals cash, for example, petty cash belonging to the organisation.
Cash register disbursements	Employee makes fraudulent entries in the records of the organisation in order to steal cash on hand, for example, by voiding a transaction on the cash register to steal the cash.
Cheque tampering	Employee steals the cheque of his employer and fraudulently makes it out to himself/herself or to an accomplice, or intercepts a cheque from a debtor and deposits it into the fraudster's bank account.
Expense disbursements	Employee submits claims for fraudulent expenses, for example, non-existent meals or inflated travel expenses.
Non-cash misappropriations	Employee steals or misuses non-cash assets, for example, inventory from the storeroom or confidential business information.
Payroll	Employee claims for overtime that was not worked or adds non-existent (ghost) employees onto the payroll.
Skimming	Employee steals money received on behalf of the organisation before it is recorded in the financial records or banked.

Source: ACFE (2014:71)

Asset misappropriation is a predominant category of fraud that is occurring globally. The nine sub-categories of fraud schemes listed above provide a portrait of the *modi operandi* employed by fraudsters in perpetrating these sorts of fraudulent schemes. Once there is an understanding as to how fraud is committed, this forms a basis for designing and implementing adequate and appropriate prevention and detection measures.

To augment the steps taken to combat fraud within an organisation, the use of red flags in conjunction with the analysis of *modi operandi* and motives should be considered. The term “*red flag*” is commonly referred to by individuals within the forensic auditing, accounting and investigation fields. A red flag is defined in the Merriam-Webster Dictionary (2015) as “*a warning sign which indicates that there is a problem that should be noticed or dealt with*”. Results of the ACFE biennial survey (2014:59) revealed that fraudsters displayed certain behavioural characteristics before a fraud was detected. Not all behavioural red flags mean that an employee is involved in committing fraud. Red flags provide the organisation with an early warning system, which indicates that something may be amiss. The ACFE (2014:59) surveyed and reported on 17 types of red flags. The types of red flags that the perpetrators of employee fraud displayed, were ranked from highest to lowest as follows:

- Living beyond their means;
- Experiencing financial difficulties;
- Having unusually close association with supplier or customer;
- Control issues and reluctance to share duties;

- “Wheeler-Dealer” attitude;
- Divorce/family problems;
- Irritability, suspiciousness or defensiveness;
- Addiction problems;
- Complained about inadequate pay;
- Past employment-related problems;
- Refusal to take vacation leave;
- Excessive pressure from within the organisation;
- Social isolation;
- Complained about lack of authority;
- Excessive family/peer pressure for success;
- Instability in life circumstances, and
- Past legal problems.

The ACFE (2014:59) found that one red flag was present during 92% of the cases surveyed, while a combination of at least two or more red flags were present in 64% of the cases. An analysis of the results indicates the top six types of red flags which constitute the majority, namely:

- Living beyond their means – 44%;
- Experiencing financial difficulties – 33% ;
- Having unusually close association with supplier or customer – 22%;
- Control issues and reluctance to share duties – 21%;
- “Wheeler-Dealer” attitude – 18%, and
- Divorce/family problems – 17%.

According to the ACFE (2014:59), these six red flags were also found to be the most common types of red flags during the previous three biennial studies that were carried out globally. Coenen (2008:127) suggests that organisations should set out a list of red flags which could be used to trigger an investigation, once a warning sign (red flag) or a combination of red flags are identified. Knowledge about these *modi operandi* will be beneficial in addressing employee fraud and prevention strategies at universities in KwaZulu-Natal.

3.8 MOTIVES OF FRAUDSTERS

The Merriam-Webster Dictionary (2014) defines motive as “*a reason for doing something*”. The motive of employees to commit fraud was briefly explained in Chapter Two. Generally, when a crime occurs, employers would like to know why the crime occurred. For example, it is not unusual for employers to want to know the reason why an employee committed fraud against their employer. Popular culture seeks this knowledge, and movies tend to focus on this aspect in the build-up to the main action.

According to Comer (1977:9), it will be useful to understand what motivates and demotivates a criminal to commit a crime, in order to enhance the prevention and detection thereof. According to Robertson (2000:193), motives that are based on financial needs prompt employees to commit fraud against their employers. This view is shared by Silverstone and Sheetz (2007:18), who suggest that financial motives are a significant motive to commit fraud.

Coenen (2008:10) likens the element of “*pressure*” from the fraud triangle to motivation. He holds the view that motivation (pressure) is the first step which activates an employee to commit fraud against his/her employer. In other words, the employee has a reason to commit fraud. Coenen (2008:11) suggests that, apart from financial reasons, there could also be non-financial reasons to commit fraud. For example, the reason could be to cover up a task that was not done well. Financial motives are more prevalent than non-financial motives. Coenen (2008:53) suggests that employees who are paid according to market rates will be less inclined to commit fraud. According to Schwartz *et al.* (2008:1), pressure on university employees to commit fraud against their employers are high due to mediocre salaries paid to staff by most universities. The publication by Schwartz *et al.* (2008:1) relates to preventing university fraud and is attached as Appendix 7 to this thesis.

3.9 PROCESS OF FRAUDSTER PROFILING

The purpose of profiling fraudsters is to recognise the type of employee who commits fraud. In respect of this study, the focus has been on employees who commit fraud against their organisations. As explained earlier in this chapter, a number of the “*Big 4*” auditing and accounting firms and the ACFE conduct biennial global fraud surveys. The results of global surveys that are explained below, were conducted by KPMG (2013:2), KPMG (2011:4), the ACFE (2014:40) and PwC (2014:15). These global fraud surveys revealed the categories of

positions occupied by the fraudsters within their organisations. The results about the type of employees who commit fraud are listed in Table 3.2 below:

Table 3.2: Category of employees who commit fraud

CATEGORY	ACFE	PwC	KPMG
Junior employees	42%	34%	18%
Management	36%	42%	29%
Owners/executives	19%	20%	35%
Other	3%	3%	18%

Source: (ACFE 2014) (PwC 2014) (KPMG 2013) (KPMG 2011)

The results of these three global surveys indicate that management and senior management constitute the majority of fraudsters. The ACFE (2014:58) revealed that the majority of fraudsters had not committed fraud previously. It was noted that 5% of the fraudsters had previous convictions for fraud-related crimes. The ACFE (2014:40) also found that 82% of the fraudsters had not been previously subjected to disciplinary action by their employers. This is corroborated by the survey by KPMG (2013:6), which found that the fraudsters were mostly first time offenders. Table 3.3 below reflects the findings of these three surveys in respect of the predominant age, gender, department employed in, and length of service of fraudsters globally:

Table 3.3: Category of age, gender, qualifications and length of service of fraudsters

CATEGORY	ACFE	PwC	KPMG
Age in years	31-45	31-50	36-55
Gender	Male	Male	Male
Qualification	University degree	University degree	University degree
Length of service in years	1-5	>10	>6

Source: (ACFE 2014) (PwC 2014) (KPMG 2013)

There were collectively 33% females and 67% males in these three surveys. The ACFE (2014:55) study also found that the fraudsters were predominantly employed (in 77% of cases) in seven departments, namely, accounting, operations, sales, executive/senior management, customer service, procurement and finance. Two of the surveys found that most fraudsters had university degrees. A difference was noted in the findings in these surveys relating to the length of time that fraudsters had been employed by the victim organisation when they committed the fraud. The ACFE (2014:52) found that the group with a length of service between 1 to 5 years were involved in the highest number of frauds. In contrast, PwC (2014:15) found that the length of service was in excess of 10 years. KPMG (2013:2) found that the length of service was in excess of 6 years. The results of the three surveys, which pertain to the length of service of employees, do not correlate with one another as the ACFE

survey indicates that employees begin to commit fraud against their employees after the first year of service and PwC found that this happens after 10 years of service.

These surveys also found that mostly well-educated male employees, holding senior positions and are first time offenders, fit the typical profile of a fraudster. The finding from the KPMG and ACFE surveys suggests that employees commit fraud after 6 years and 10 years of service, which indicates that fraud predators are not necessarily a prevalent group. Dorminey *et al.* (2011:23) suggest that fraud predators commence with their fraudulent activities immediately when they commence a new job, not after 6 or 10 years. This section is particularly relevant to employee fraud and prevention strategies at universities in KwaZulu-Natal.

3.10 SUMMARY

This chapter explained in detail the theory of employee fraud, the fraud triangle model, the fraud diamond model, the nature of employee fraud, the extent of employee fraud, the respective *modi operandi* of fraudsters, the motives of fraudsters and fraudster profiling.

The ongoing global fraud surveys reflect that employee fraud continues to have a negative financial impact on organisations. The fraud triangle model and other models that have since emerged after it, afford organisations a chance to understand why fraud is perpetrated by their employees. Despite the existence of various laws prohibiting fraud, this crime continues unabated. There is a need for organisations to focus on addressing lapses in the ethical culture amongst their employees, as well eradicating opportunities which fraudsters exploit. Employees with a criminal mind-set coupled with an attitude of arrogance, pose a risk to their employers. Most fraudsters emanate from the senior and executive management cadres. Misappropriation of the assets is the most prevalent category of employee fraud. Red flags serve a useful purpose in alerting employers about potential fraudulent activities of their employees.

Given this background to the occurrence of fraud, the next chapter explores the prevention of fraud and provides an explanation of the fraud risk management models that are available for organisations in the fight against fraud.

CHAPTER FOUR

PERSPECTIVES OF FRAUD PREVENTION

4.1 INTRODUCTION

During the rule of the Greek empire, around 500 B.C., Lee (1971:152) describes how “*checking clerks*” were appointed to verify receipts and payments relating to governmental organisations. These receipts and payments were approved and ordered by magistrates who were appointed for that purpose. There is further indication that ancient civilisations were not only designing and implementing control measures, but were adapting newer ones over time. In modern times, fraud prevention has become an integral component of conducting business throughout the world. With the advent of evolving business practices, organisations conducting business across geographical and political borders, and the sophistication of computer technology, fraudsters have also adapted their *modi operandi* to perpetrate fraud in the twenty-first century. In order to prevent fraud, governments have enacted legislation, while organisations in general have implemented or amended relevant fraud prevention policies and procedures. The pervasiveness of fraud in society has also resulted in the setting up of global organisations that are involved in providing advisory consulting services, to design models and frameworks aimed at preventing organisations from becoming victims of fraud. This chapter elaborates on a number of fraud prevention models and frameworks. In this study, the Fraud Risk Management Model, which was compiled by KPMG (2006), is explored in more detail with focus on selected constructs relevant to employee fraud and prevention strategies at universities in KwaZulu-Natal.

4.2 FRAUD PREVENTION THEORY

During the period 1100 to 1200 A.D., accounting duties were segregated, according to Lee (1971:151), in order to serve as a control measure. Lee (1971:154) holds that a “*tally stick*” was also used at the time and served the purpose of a receipt, with one of the objectives being to prevent fraud and error. According to Lee (1971:154), a “*pipe roll*” was in use in England during the same period in order to maintain a record of the revenues due to the monarchy, as well as what was collected and the cost incurred to collect the revenues.

Wells (2002:28) theorises that educating employees about fraud is relevant in protecting organisations from becoming victims of fraud, because awareness about how various fraud schemes are perpetrated equips organisations from becoming victims. Wells (2002:28) points out that the prevention of occupational fraud is easier than its detection. In relation to the topic of this study, Peltier-Rivest (2014:37) specifically holds that numerous universities do not report frauds of which they were victims, because they want to protect their reputation with stakeholders such as students and donors. Peltier-Rivest (2014:40) shows that universities can effectively combat fraud if they implement a mechanism which allows people to anonymously report fraud.

Abbasi *et al.* (2012:1293) emphasise that detecting fraud remains a challenge for technology that is used for business intelligence purposes. It is beneficial for organisations to prevent fraud from occurring than detecting it. According to Adams *et al.* (2006:56), prevention is a cost-effective way in which to deal with financial loss attributed to fraud. Kranacher (2013:80) suggests that the focus of antifraud efforts is moving from detection to prevention.

According to Gannaway (2013:12), it is a requisite, in the prevention of fraud, to accept that fraud is a common occurrence which is also perpetrated by the most trusted employees. In support, Tusek and Klikovac (2011:60) suggest that an appropriate fraud prevention intervention is the implementation of a code of ethics for all employees in an organisation. It is relevant for management, who are responsible for the prevention of fraud, to assess all fraud risks in their work environment and devise proactive fraud prevention strategies to address the risks. Placing reliance on internal controls only to prevent fraud is misguided, as management needs to lead by example and also educate employees about ethical conduct. The issue of ethics within a sound governance framework should be addressed by management who need to set the tone for ethical conduct which staff are expected to follow.

According to Coenen (2008:2), most organisations have control systems that are not designed to prevent fraud from occurring because fraudsters violate these systems for their own financial gain. Coenen (2008:18) holds that employees should be made aware that prompt action will be taken against them should they commit fraud. This deters future acts of fraud against the organisation. Coenen (2008:148) asserts that fraudsters violate existing internal controls in order to commit and conceal fraud. Preventive internal controls are a prerequisite for fraud prevention. Coenen (2008:159) consequently offers a fraud prevention framework which is

based on three key aspects. They are fraud education, investigation, and prevention techniques. Firstly, the education aspect involves educating employees about the risks of fraud. Secondly, is the investigation of fraud whenever it is suspected. Lastly, designing and implementing internal controls that prevent the perpetration of fraud, are essential. While it may be stated that internal controls are not the only measure that will prevent employee fraud, the model proposed by Albrecht *et al.* (2006:111) advocates a range of interventions, including internal controls, for the prevention of fraud. This section sets out relevant aspects that should be considered in addressing employee fraud and prevention strategies at universities in KwaZulu-Natal.

4.2.1 Legislation

According to Burchell (2005:9), criminal law is used as a social mechanism that is used to instil fear into people not to commit crime, by threats of negative consequences against them in the form of punishment being imposed on them should they not abide by the law. The primary purpose of criminal law is to prevent crimes from taking place. Burchell (2005:10) avers that punishment entails depriving one of something, or inflicting suffering on a person found guilty of committing a crime. He (2005:18) postulates that penology deals with addressing criminal behaviour with the objective of rehabilitating the criminal so that s/he does not commit crimes again. The existence of criminal law also serves a preventative purpose by prohibiting certain conduct that is deemed to be unlawful. An act is unlawful and is also punishable by the state, through incarceration, paying a fine or community service. The obvious implication for the perpetrator is that s/he would have a criminal record which would impact on future employment that is sought.

4.2.1.1 Constitution of South Africa Act 108 of 1996

According to Burchell (2005:116), the Bill of Rights embodied in the Constitution of the Republic of South Africa Act 108 of 1996 is the authoritative legislation in the country; the provisions of all statutes, common law and customary law should be aligned with the norms of the Bill of Rights. Section 29 (1) (b) of the Constitution of the Republic of South Africa Act 108 of 1996 stipulates that “*everyone has the right to further education, which the state, through reasonable measures, must make progressively available and accessible*”. Further education includes education provided by public universities, which are funded by the state. The state has a duty to progressively make further education available to all its citizens. The

Merriam-Webster Dictionary (2014) defines “*progressively*”, which is used in the Bill of Rights, as “*happening or developing gradually over a period of time*”. The perpetration of fraud by employees of universities contributes towards undermining this right, as universities are unable to gradually increase the number of new students at universities due to constrained funding. The need to prevent employee fraud at universities is essential, according to Peltier-Rivest (2014:37), as it contributes towards ensuring the mitigation of reputational risk and the continued financial support from governments and donors, which is essential for the sustainability and growth of public universities.

Section 195 of the Constitution of the Republic of South Africa Act 108 of 1996 relates to the values and principles that govern public administration. The salient principles that relate to preventing employee fraud at universities in KwaZulu-Natal in particular and other public institutions in general are:

- Professional ethical standards must be maintained;
- Resources must be utilised efficiently and effectively, and
- There must be accountability from those entrusted with public administration.

The White Paper on Transforming Public Service Delivery (Batho Pele White Paper) was implemented within the public sector in South Africa in 1997. The Batho Pele (People First) (2010:2) principles, were designed and implemented by the South African government in order to ensure effective and efficient service delivery to the public based on sound ethics. Section 8 of the Batho Pele principles (2010:77) relates to education, and to higher education in particular, which is the focus of this study.

Section 195 of the Constitution of the Republic of South Africa Act 108 of 1996 as well as the Batho Pele principles are explained in further detail in Chapter Six.

4.2.1.2 Higher Education Act 101 of 1997

The Higher Education Act 101 of 1997 stipulates under Section 27 (1) that the Council of a public higher education institution is tasked with the governance of that institution within the parameters of applicable laws and the statute of that institution. According to the Merriam-Webster Dictionary (2014), the word “*govern*” is defined as “*to officially control and lead (a group of people)*”. It is the role of the Council of a public higher education institution to ensure

that the institution is managed in an effective and efficient manner in line with good governance principles espoused in Section 195 of the Constitution of the Republic of South Africa Act 108 of 1996, Batho Pele principles (2010:77) and King III (2009:16).

4.2.1.3 Prevention of Organised Crime Act 121 of 1998

The Prevention of Organised Crime Act 121 of 1998 is intended to combat organised crime, money laundering and criminal gang activities. As fraud is one of the crimes that may be committed in an organised manner, it is listed under Schedule 1 of this Act. Of relevance to this study are the prohibitions and implications for persons who perpetrate fraud as an organised crime activity. There is a common law responsibility that people who are aware of organised criminal activities, to report such to the police so that these could be investigated so that those who are implicated could be successfully prosecuted.

4.2.1.4 Protected Disclosures Act 26 of 2000

The Protected Disclosures Act 26 of 2000 aims to encourage the eradication of criminal and irregular behaviour within the workplace. This Act encourages employees to make a protected disclosure against an employer or the employee of an employer who is suspected to be committing an offence. Section 1 of the Act stipulates, *inter alia*, that an employee may make a protected disclosure when s/he has reason to believe that a criminal offence was, or is being, or is going to be, committed. The Act prohibits the employee, who has made a protected disclosure, from being subjected to any occupational detriment by the employer. Section 1 defines occupational detriment as, *inter alia*, the employee being subjected to disciplinary action, harassment, intimidation and dismissal due to the protected disclosure s/he has made. The provisions of this Act are essential when organisations consider implementing an anonymous whistle blowing service. Employees require assurance that their confidential disclosure would not be detrimental to their continued employment.

4.2.1.5 Prevention and Combating of Corrupt Activities Act 12 of 2004

The Prevention and Combating of Corrupt Activities Act 12 of 2004 is intended, *inter alia*, to enhance the measures to prevent corrupt activities, including fraud. This Act succeeded the previous Corruption Act 94 of 1992. In the preamble to this latest Act, it states that “*the illicit acquisition of personal wealth can be particularly damaging to democratic institutions,*

national economies, ethical values and the rule of law". The impact of corrupt and fraudulent activities is widespread, necessitating the creation of this Act. A further measure aimed at preventing and combating fraud and corruption is contained in Section 34 (1) (b) of this Act, which makes it incumbent upon any person in authority, who is aware or should be aware, that any person has committed theft, fraud extortion, forgery or presenting a forged document, valued at R100 000 or more, has to report this to a police official. The Act aims to engender a culture of reporting violations to the police for the investigation and prosecution of offenders.

4.2.1.6 Companies Act 71 of 2008

The Companies Act 71 of 2008 was promulgated in order to, *inter alia*, define the relationships between companies, their directors and shareholders, as well as how companies are incorporated, managed, operated and governed. Section 159 of this Act also deals with the protection of whistle blowers. The Act reaffirms the provisions of the Protected Disclosures Act 26 of 2000 insofar as it relates to the Companies Act. Various forms of fraudulent conduct are prohibited in the Companies Act and punishable in law. In terms of this study, the Companies Act contributes towards the prevention of fraud by setting out the prohibitions and penalties for transgressions of the Act. The Act serves a deterrent value to potential fraudsters. The Act is not directly applicable to higher education institutions as they are not regarded as companies in terms of the Act.

4.2.1.7 Pension Funds Act 24 of 1956

In terms of the Pension Funds Act 24 of 1956, employers who are defrauded by their employees are entitled to recover the value of the loss, including legal fees, from the pension fund benefits of the employee who is implicated. Section 37D deals with the pension fund making certain deductions from the pension fund benefits. Section 37D (1) (b) (ii) authorises a pension fund to deduct compensation that is due to the member's employer for damage suffered by it due to fraud, theft or misconduct from the pension fund benefits of the employee. This Section of the Act also serves as a deterrent to other employees. It reminds them that the employer is able to recover the value of loss from their pension fund benefits. In instances where, for example, an employee resigns before any disciplinary action could be instituted against him/her, the employer has recourse to recoup its loss from the pension fund benefits of the implicated employee. This Act contributes to the prevention of employee fraud. These Acts

should be taken into consideration when addressing employee fraud and prevention strategies at universities in KwaZulu-Natal.

4.2.2 Fraud Prevention Initiatives

Fraud prevention is essential for the sustainability of any organisation, not least universities. According to Abbasi *et al.* (2012:1294), fraud schemes continue for many years before being detected, which indicates the fraud prevention systems that were implemented had little effect in preventing fraud from taking place. Adams *et al.* (2006:56) hold the view that fraud has negative consequences for a business, which could lead to its demise if there are no fraud prevention procedures in place. The authors describe fraud prevention as a set of proactive measures aimed at preventing or mitigating fraud. Boyle *et al.* (2012:62) suggest that fraud prevention and detection initiatives should be focused on chief executive officers (CEOs) and chief finance officers (CFOs) of companies in respect of fraudulent financial reporting of cases, as such individuals are prone to be implicated in such frauds. Gannaway (2013:12) proffers that the leadership of organisations should set a strong ethical tone at the top, which their employees should follow, together with a code of conduct followed by awareness training for all employees about the tone at the top and the code of conduct. This will encourage employees, who may be inclined to commit fraud, to desist from doing so.

Hambleton (2011:19) makes a comparison between the “*sickness model*” used in the health care industry and enforcement against fraud. Another comparison is made between the health care “*wellness model*” and fraud prevention. Hambleton (2011:19) explains that the “*sickness model*” is reactive and treatment occurs after the onset of the sickness, similar to enforcement which takes place after the fraud is detected. However, the “*wellness model*” is proactive in its approach, requiring members to participate in wellness programs aimed at keeping them healthy, similar to fraud prevention and compliance programs. The prevention of fraud is a proactive approach which requires employees to participate in maintaining a healthy organisation similar to the “*wellness model*”. A preventative approach is preferred.

According to Schwartz *et al.* (2008:1), universities are erroneously perceived to be places where ethical standards are of the highest level whereas this is unfortunately not so. Peltier-Rivest (2014:37) holds that poor internal controls at universities provide opportunities for fraud to be perpetrated. Universities are beset with fraud as are other organisations. There is a

need to design and implement robust anti-fraud policies and procedures in order to prevent fraud from occurring. In this study, the fraud prevention model includes more than sound anti-fraud policies and procedures.

4.2.2.1 Fraud Policy and Response Plan

It is essential for organisations to create and implement a fraud policy and response plan. According to the Chartered Institute of Management Accountants (CIMA, 2008:44), organisations should address fraud by designing and implementing a fraud policy and response plan. The policy should stipulate the action that will be taken once fraud is detected or suspected. Such a policy serves multiple objectives. It has an effect on fraud prevention, detection and response (investigation). The policy should guide the process of evidence gathering to ensure admissibility in courts of law. CIMA (2008:44) also avers that the policy should emphasise the commitment of the organisation to high standards of legal, moral and ethical conduct as well as spell out the consequences for employees who do not adhere to these standards. According to Ernst and Young (EY; 2013:2), it is essential to have a well-defined fraud response plan that will ensure that investigations are conducted ethically and effectively. The Fraud Policy and Response Plan of UKZN (2015) is attached as Appendix 11 to this thesis. The Institute of Internal Auditors (IIA; 2009:20) argues that a fraud policy is essential for management, in which a strong ethical culture amongst all employees within the organisation is stipulated. Krummeck (2000:269) holds the view that a fraud policy should be seen to be endorsed by executive and senior management, and communicated throughout the organisation for it to be successful.

4.2.2.2 Whistle-Blowing

The results of a global survey conducted by the ACFE (2014:19) show that 42 percent of employee fraud was detected by means of a tip off. This result emphasises the benefit to organisations in having a whistle blowing facility together with a relevant policy to address fraud. According to Lord (2010:14), most organisations do not have a process of rewarding whistle blowers for providing a tip off, despite the fact that tip offs are the most predominant means of detecting fraud. In an instance when a person who provides a tip off wishes to remain anonymous, the assertion by Lord (2010:14) may not be possible. The ACFE (2014:21) holds the view that organisations generally share information about the fraud hotline with employees only.

Nilsen (2010:22) proffers that it is essential in a fraud prevention and detection program to ensure the provision of an anonymous, confidential and independent system for reporting fraud. Reidy and Theobald (2011:48) hold the view that whistle blowing programs are effective tools in combating fraud. According to Reidy and Theobald (2011:48), the Sarbanes-Oxley Act of 2002 in the United States of America (USA) compelled organisations to implement a whistle blowing program in order to receive and respond to reports about fraudulent activities. Subsequently, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 compelled the U.S. Securities and Exchange Commission (SEC) to reward whistle blowers for reporting transgressions of federal securities legislation in the USA. According to the website of the U.S. SEC (2014), the Commission is authorised to provide *“monetary awards to eligible individuals who come forward with high-quality original information that leads to a Commission enforcement action in which over \$1,000,000 in sanctions is ordered. The range for awards is between 10% and 30% of the money collected”*. According to Krummeck (2000:271), employees will report fraud only if they trust the system.

4.2.2.3 Ethics

According to CIMA (2008:28), designing and implementing anti-fraud policies and a code of ethics are not sufficient in addressing fraud. Organisations need to inculcate a culture of ethical conduct amongst all its employees, from its leadership to the most junior employee. Employees should emulate their leadership and management and act ethically. CIMA (2008:28) avers that management should not adopt double standards and act unethically, yet expect their subordinates to behave otherwise. Reidy and Theobald (2011:50) hold the view that it is essential for management to engender a sound ethical culture at the top, which is supported by management leading by example and providing awareness training to employees. According to Krummeck (2000:271), employees can be prevented from committing fraud if they are reminded about the impact their incarceration for fraud will have on their families. This will assist in inculcating a sound ethical culture within the organisation.

4.2.2.4 Fraud Awareness

According to Reidy and Theobald (2011:50), providing fraud awareness training to employees is one of the standard fraud prevention methods that organisations utilise. Krummeck (2000:269) suggests that organisations should be transparent in their communication with employees by providing training to them to make them aware of what they need to look out

for, the nature of fraud, the manner in which it was committed and relevant statistics which may indicate a pattern of fraud. Krummeck (2000:269) avers that employees will not be equipped to assist in the prevention of fraud in the absence of this type of training. Employees who are trained to identify fraud schemes will be valuable in reporting fraud when they encounter it. Krummeck (2000:271) suggests that the provision of awareness training to employees about fraud and unethical conduct should also include highlighting its devastating effect on the entire organisation. According to Albrecht *et al.* (2006:111), Coenen (2008:159) and CIMA (2008:24), educating and making employees aware of fraud is an essential fraud prevention intervention. This section should be considered when addressing employee fraud and prevention strategies at universities in KwaZulu-Natal.

4.3 FRAUD PREVENTION MODELS

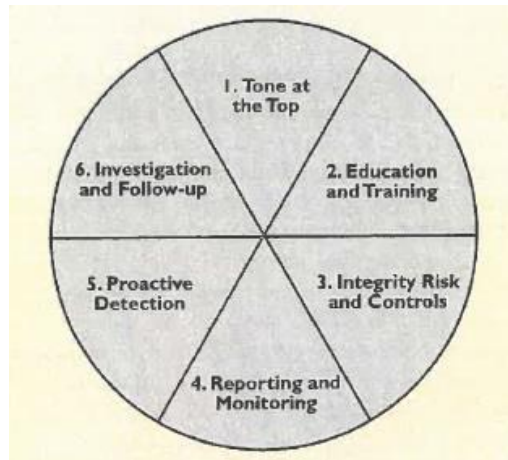
In order to address employee fraud, various fraud prevention models have been designed by various authors and organisations. These models are elaborated on below. For purposes of this study, the KPMG Fraud Risk Management Model was chosen and is explained in detail. The KPMG model was chosen because of its direct relevance to this research as well as the comprehensive approach proposed by the KPMG model in addressing fraud globally.

4.3.1 Fraud-Fighting Model

Albrecht *et al.* (2006:111) suggest a fraud-fighting model to combat fraud. They assert that the prevention of fraud yields large savings for an organisation. The detection and investigation of fraud costs money as it does not address the root causes, which result in recurring frauds with inherent losses and risks. Their proposed model to combat fraud suggests six elements, namely, tone at the top, education and training, integrity risk and controls, reporting and monitoring, proactive detection and investigation and follow-up. First, the tone at the top entails having a good code of conduct, and management leading by example, based on this code. Second, educating employees about fraud and what they need to do if they encounter fraud, is essential. Third, management should assess frauds that have occurred and design and implement internal controls that prevent a recurrence. Fourth, reporting and monitoring entails the provision of a fraud hotline by which employees can report their suspicion of fraud as well as monitor, by means of audits and reviews by both internal and external auditors and management. Fifth, proactively detecting fraud entails conducting an analysis of data. Lastly,

the investigation and follow-up element entails having a policy and procedure in place that sets out how the investigation will be executed. Figure 4.1 below shows the fraud-fighting model:

Figure 4.1: Fraud-Fighting Model



Source: Albrecht *et al.* (2006:111)

Albrecht *et al.* (2006:111), Coenen (2008:159) and CIMA (2008:24) propose the following common fraud prevention interventions:

- Education for employees in the form of fraud awareness, and
- Implementation of adequate internal controls.

It is essential to approach fraud prevention in a holistic manner rather than piecemeal. Although fraud awareness training and internal controls are essential interventions in preventing fraud, they may not be the only interventions that will result in the successful prevention of fraud. Albrecht *et al.* provide a holistic approach to fraud prevention. In this regard, CIMA (2008:24) suggests that prevention initiatives should include the introduction of relevant policies, procedures and internal controls combined with fraud awareness training to employees.

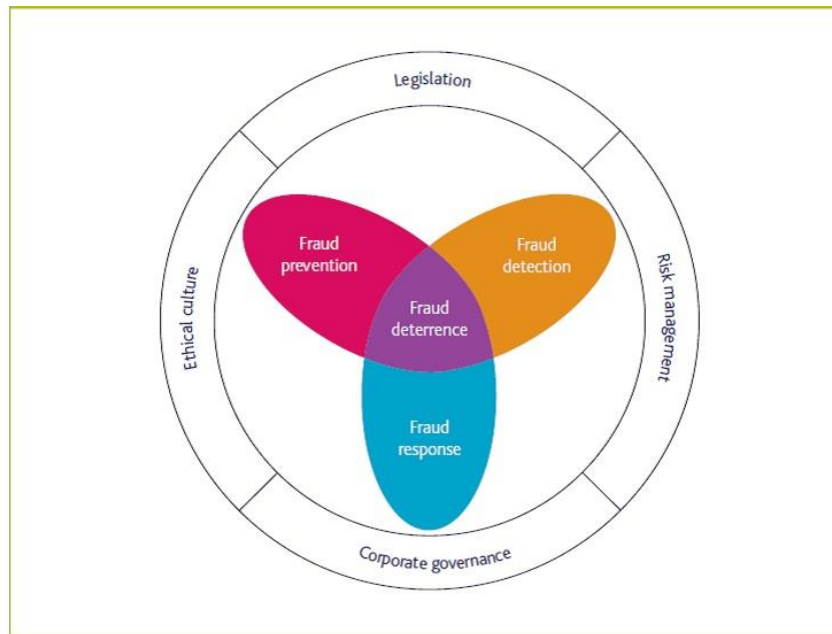
4.3.2 CIMA's Anti-fraud Strategy

CIMA (2008:24) suggests that organisations should develop a strategy to combat fraud. According to CIMA (2008:24), there are various ways to prevent fraud which should include anti-fraud policies, procedures, preventive internal controls and fraud awareness training. They hold the view that fraud prevention techniques, although essential, are unable to totally eradicate opportunities to commit fraud. CIMA (2008:24) suggests that the prevention and

detection of fraud are equally essential in successfully combating fraud, and should be an essential part of the anti-fraud strategy of an organisation.

The anti-fraud strategy of CIMA (2008:25) comprises of four elements: prevention, detection, deterrence and response. Figure 4.2 below reflects that these four elements are intertwined. In considering a fraud prevention strategy or model, it is essential to include all these elements in the strategy or model as they contribute holistically to fraud prevention.

Figure 4.2: Anti-fraud Strategy



Source: CIMA (2008:25)

Another essential aspect of the CIMA anti-fraud strategy is that it is founded on the existence of relevant legislation and policies, as well as on sound risk management, corporate governance and ethical principles. It is argued that a sound ethical culture within an organisation creates a low risk of fraud taking place. According to CIMA (2008:26), when minor unethical conduct is condoned, it leads to more significant fraudulent actions committed by senior management, also to be condoned. Organisations should be committed to not condoning fraud in any manner or form. The existence of high ethical standards in an organisation sends a clear message to suppliers, clients, employees and other stakeholders that it is committed to honesty and integrity in its business operations (CIMA; 2008:26). In this regard, it is suggested that fraud awareness training is provided to all employees, which educates them how fraud is committed and how to identify it and report any suspicion of its existence. According to CIMA (2008:29), educating employees about fraud does not pose a

risk to the organisation. Employees would not use this new knowledge to commit fraud. Rather, such intervention would reduce fraud risks in the future. Employees should be encouraged to report suspicions about fraud to a whistle blowing facility (CIMA; 2008:30). The existence of such a whistle blowing facility has both a prevention and detection effect on fraud within an organisation.

Another aspect of fraud prevention involves the implementation of a system of sound internal controls. According to CIMA (2008:32), the overall responsibility to prevent and detect fraud lies with management and the board of an organisation. Internal controls comprise policies and procedures, and typically include aspects such as an approval and authorisation process, access restriction and control of transactions, reconciliation of accounts and physical security (CIMA; 2008:34). The segregation of incompatible duties is essentially part of the internal control process. Where the segregation of duties is not possible, CIMA (2008:34) suggests that management should exercise additional verification and control, including the periodic involvement of internal auditors.

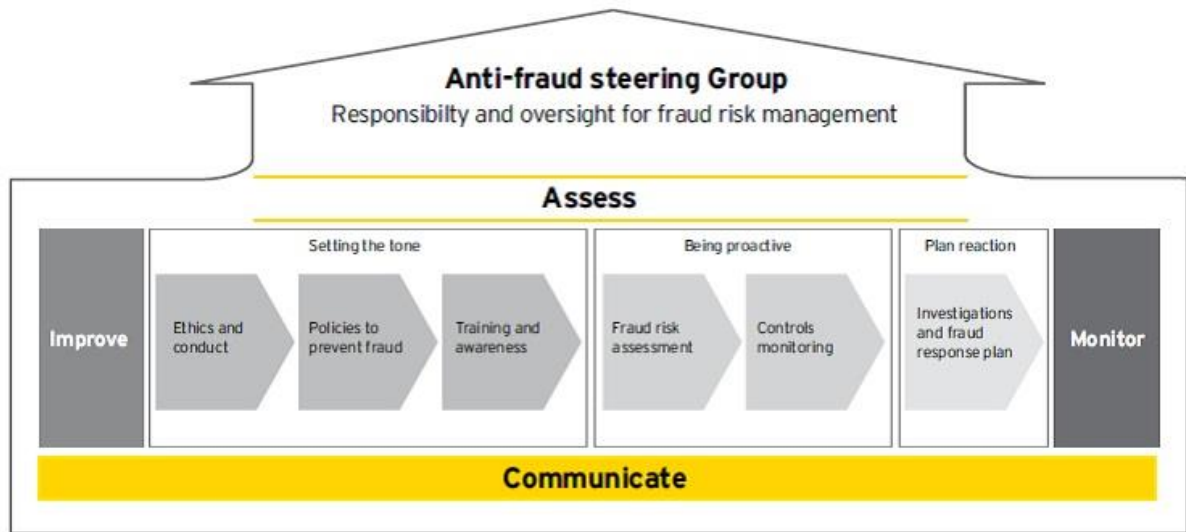
4.3.3 EY Fraud Risk Management Model

Ernst and Young (EY; 2013:1) suggest six key factors that are essential for an effective fraud risk management process in an organisation. These are:

- trusting the employees is not sufficient to prevent fraud;
- provide fraud awareness training to employees;
- communicate the essence of the employee code of conduct;
- protect whistle-blowers;
- implement a fraud response plan, and
- customise the fraud risk management strategies to local conditions.

These factors are depicted in Figure 4.3 below:

Figure 4.3: Fraud Risk Management Model



Source: EY (2013:1)

Aspects of the EY Fraud Risk Management Model (2013:1), which specifically address fraud prevention, are depicted under the phase that deals with “*Setting the tone*” in Figure 4.3 above. The three aspects are:

- ethics and conduct;
- policies to prevent fraud, and
- training and awareness.

Although this model does not provide additional detail about the various constructs of the model, it appears to echo what other fraud risk management models are advocating.

4.3.4 PwC Fraud Wheel

According to PwC (2009:14), the “*fraud wheel*” was adapted from the COSO model which was originally designed to evaluate internal controls during 1992. In Figure 4.4 below, the fraud wheel reflects some of the essential factors of a fraud risk management framework.

Figure 4.4: Fraud Wheel



Source: PwC (2009:14)

The fraud wheel depicts that the tone and ethical standards of an organisation encompass the entire fraud risk management programme. This is followed by a second layer on the fraud wheel comprising five aspects, namely:

- Control environment;
- Risk assessment;
- Control activities;
- Information and communication, and
- Monitoring.

According to PwC (2009:15), the cornerstone to a sound fraud risk management framework is a sound ethical culture with management setting the tone at the top. Then, there are 12 essential factors that ensure that an organisation has a sound fraud risk management strategy. These 12 factors constitute the sub-categories of the five aspects described above:

- Control environment:
 - sound governance culture;
 - fraud strategy and related policies;
 - robust recruitment and promotion processes, and

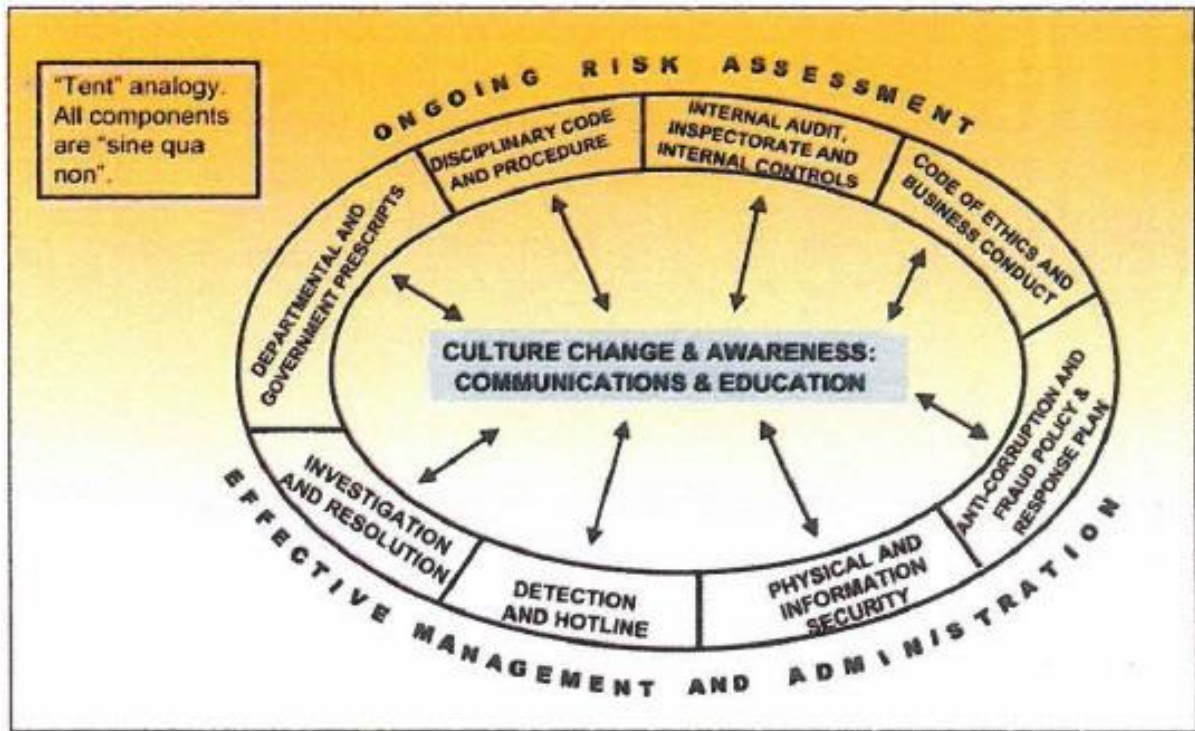
- response to fraud.
- Risk assessment:
 - misappropriation risks;
 - financial reporting risks, and
 - other risks.
- Control activities:
 - control linkage and evaluation.
- Information and communication:
 - management information to address fraud risks, and
 - communication, awareness and training of employees about fraud risks.
- Monitoring:
 - internal audit and
 - management oversight.

The fraud wheel provides a comprehensive perspective about the management of fraud risks. Although all aspects of the fraud wheel may not be regarded as pure fraud prevention interventions, they do contribute to the overall governance of an organisation.

4.3.5 KwaZulu-Natal Provincial Anti-Corruption Strategy

The Province of KwaZulu-Natal (2008:4) devised and implemented an Anti-Corruption Strategy (ACS) because it identified that fraud and corruption had a negative effect on service delivery to the citizens of KwaZulu-Natal and needed to be eradicated. The ACS contains three appendices. Firstly, Appendix A stipulates how the various departments and public entities in the Province should constitute an anti-corruption sub-committee together with a term of reference. Secondly, the ACS specifies a “Code of Good Practice” for all departments and public entities in the Province, with specific reference to the creation and implementation of fraud prevention plans. Lastly, a “Code of Conduct and Business Ethics” is prescribed which focuses on sound business and ethical practices by all stakeholders. Figure 4.5 below depicts the analogy of a tent in describing the ACS:

Figure 4.5: Tent Analogy



Source: Province of KwaZulu-Natal (2008:14)

It can be observed from the tent analogy above that the ACS is focused on inculcating an ethical culture and creating awareness by means of educating all stakeholders in the Province of KwaZulu-Natal as the foundation for the prevention of fraud and corruption. The Province of KwaZulu-Natal (2008:13) sets out as its prevention strategy, *inter alia*, based on the implementation of the following interventions:

- Code of conduct;
- Whistle-blowing facility;
- Induction training for new employees on preventing fraud;
- Recruitment of employees based on sound anti-fraud considerations;
- Policies on the disclosure of gifts, personal interests and private remunerative work, and
- Key performance areas of employees should include governance.

The Province of KwaZulu-Natal (2008:14) also stipulates that the fraud prevention interventions should include, *inter alia*, the following:

- Assess fraud risks;
- Inculcate a sound ethical culture for fraud prevention;

- Adopt a zero-tolerance approach to fraud;
- Blacklist individuals found to be committing fraud and corruption;
- Provide information to the public about the circumstances that led to fraud as well as the fraud prevention measures that have been implemented, and
- Avert conflicts of interest.

The Province of KwaZulu-Natal (2008:44) advocates, in the ACS, the creation of an anti-corruption sub-committee in the various departments and public entities in the Province. The objective is to ensure synergy among the various entities that are involved in the prevention of fraud and corruption in the Province, including external stakeholders such as the South African Police Service and the National Prosecuting Authority.

In terms of good practice the ACS provides guidelines to all departments and public entities in the Province for designing and implementing fraud prevention plans. In preventing fraud, the Province of KwaZulu-Natal (2008:34) stipulates, *inter alia*, the following interventions:

- Appoint competent forensic investigative/accounting capacity;
- Implement strong internal controls to detect fraud;
- Maintain adequate records of all reported cases;
- Provide awareness education to stakeholders on relevant fraud prevention legislation, fraud risks and “red flags”;
- Management should set a strong ethical tone and lead by example, and
- Departments and public entities in the Province should apply the sound governance principles espoused in King II.

According to Sindisiwe Cele (personal communication, 21 May 2015), who is a senior manager within the Anti-Fraud and Corruption Integrity Management Unit in the Office of the Premier in the Province of KwaZulu-Natal, the Province has already implemented policies relating to whistle-blowing, ethics, conflict of interest and anti-fraud. Each department in the Province has a fraud prevention plan which is reviewed annually and amended accordingly. The Province does not have a fraud hotline and therefore relies on reports received from the National Anti-corruption Hotline which is administered by the Office of the Public Service Commission (PSC). The PSC forwards the reports to the relevant Office of Premier of the Province. The reports are thereafter forwarded to the relevant Director General of the

department, who in turn forwards the report to the relevant Head of Department for attention. The PSC expects an update about the report from the Province within 40 days. Investigations into fraud and corruption may be referred to the Provincial Treasury department which has an investigative capacity. The various departments in the Province have their own investigators who probe fraud and corruption. In instances where reports are received about fraud and corruption within municipalities these are forwarded to the Department of Co-operative Governance and Traditional Affairs (COGTA). The Integrity Management Unit in the Province conducts regular “roadshows” as part of the ACS training and awareness campaign in the various communities and local districts in the Province. The Integrity Management Unit has engaged the services of Ethics South Africa to facilitate workshops at selected departments in the Province in order to inculcate a sound ethical culture. The ACS is being reviewed currently with the intention to update it and bring it in accordance with latest best practice.

The ACS of the Province of KwaZulu-Natal, albeit undergoing review and amendment, provides useful information about fraud prevention interventions which could be beneficial to Universities in KwaZulu-Natal in combating employee fraud.

4.4 KPMG FRAUD RISK MANAGEMENT MODEL

This particular model was chosen for detailed analysis, given the purposes of this study. The Fraud Risk Management Model by KPMG (2006:20) proposes essential anti-fraud practices that are in use globally by organisations to prevent, detect and respond to fraud. As one of the globally recognised “*Big 4*” auditing and accounting firms, KPMG created this model which they utilise to manage fraud risks for their clients.

Figure 4.6: Fraud Risk Management Model



Source: KPMG (2006:20)

KPMG (2006:2) hold the view that there is no single fraud risk management model or approach that can be used for all organisations. Due to the unique nature of each organisation, the strategy should be adapted accordingly. As depicted in Figure 4.6 above, there are three fundamental factors that are addressed in the KPMG model, namely, prevention, detection and response to fraud. In this study, the element relating to prevention is elaborated on as it is directly linked to the focus of this research.

There are six constructs to the KPMG fraud risk management model. They are:

- Defining fraud risk management;
- Convergence of regulatory challenges;
- Prevention;
- Detection;
- Response, and
- An ongoing process.

For purposes of this research only two of these constructs, and their sub-constructs were examined:

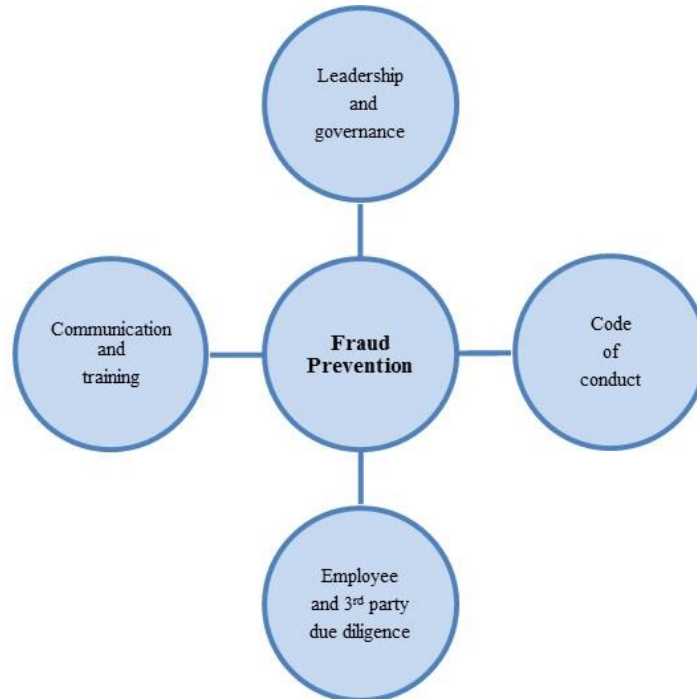
- Prevention:
 - Leadership and governance
 - Code of conduct
 - Employee and 3rd party due diligence
 - Communication and training
- An ongoing process
 - Assessment
 - Design
 - Implementation
 - Evaluation

The constructs of the prevention and the ongoing process are relevant to this research, as KPMG (2006:8) deals specifically with the prevention of fraud. These constructs and sub-constructs of the fraud risk management model were used to explore the methods and techniques that are used to prevent fraud from occurring.

4.4.1 Fraud Prevention

The model shown in Figure 4.7 below has been adapted for this study from the KPMG Fraud Risk Management model (2006:8). The constructs and sub-constructs are explained below:

Figure 4.7: Adapted from the Fraud Risk Management model



Source: KPMG (2006:8)

4.4.1.1 Leadership and Governance

According to KPMG (2006:8), leadership and governance requires emphasises to be placed on four aspects. These are board or audit committee oversight, senior management oversight, Internal Audit function, and fraud and misconduct risk assessment.

- Firstly, directors of a board (in the case of universities, the members of Council) play an essential role in overseeing the implementation of internal controls intended to mitigate fraud risks. In some instances, such an oversight role is delegated to the audit committee by the board. Directors should ensure that internal controls are adequate and effective. Setting the tone for ethical behaviour in an organisation is the joint responsibility of the board and management.
- Secondly, senior management should be responsible for oversight of the fraud risk management interventions that are implemented. Their oversight should be primarily on prevention, but detection and response to fraud should not be overlooked. The chief executive officer (in the case of universities, the Vice-

Chancellor) is best placed to set an appropriate ethical culture within the organisation. S/he is able to lead by example and direct the effort with assistance of the senior management team. The chief executive officer should hold members of the senior management team accountable for non-compliance to policies and procedures. This message should permeate the organisation and serve to consolidate an ethical culture within. It is suggested by KPMG (2006:9), that a leader in a senior management position be tasked with oversight of all interventions that are aimed at combating fraud. Such a leader should be responsible for the prevention, detection and response to fraud risks. This leader should:

- Coordinate the fraud risk assessments within the organisation;
 - Design and implement policies and procedures for ethical business practices;
 - Ensure oversight of the fraud risk management initiatives and controls, and
 - Provide a report to the board or the audit committee about the results of the anti-fraud initiatives.
- Thirdly, the Internal Audit department should participate in combating fraud and move away from their traditional role of testing for the effectiveness of internal controls. It is suggested that the internal audit department should be held responsible for:
 - Evaluating the design and effectiveness of internal controls intended to prevent or detect fraud;
 - Assisting in the fraud risk assessment process and advising on the adequacy and effectiveness of mitigating controls, and
 - Reporting to the audit committee about its findings in this regard.
 - Fourthly, fraud risk assessments assist management in identifying the unique fraud risks faced by the organisation, deficiencies in the current internal controls and designing appropriate mitigation strategies and controls to address the weaknesses. Fraud risk assessments should take place throughout the organisation and not in selected areas of operation. The audit committee plays an oversight role in this process and ensures that the assessments are an ongoing effort. A typical fraud risk assessment process is depicted in Figure 4.8 below as a four-step process:

Figure 4.8: Fraud Risk Management Process



Source: KPMG (2006:10)

The four-step risk assessment process should:

- identify the areas of risk that require assessment;
- list and categorise the risks;
- rate the risks, and
- mitigate the risk by enhancing internal controls.

4.4.1.2 Code of Conduct

As suggested by KPMG (2006:11), a code of conduct is an essential tool with which an organisation communicates its standards of ethical conduct to employees. This should include communication to clients, suppliers and stakeholders. Such a code sets a strong tone within the organisation about the commitment of management to a sound ethical culture. In order for this tone from the top to permeate throughout the organisation, it requires that employees are made aware of the code and the commitment of management to a culture of integrity. KPMG (2006:11) proposes that a code of conduct should include the following aspects:

- high level support and commitment to the code from senior management;
- language used should be easily understandable;
- provide guidance for compliance to relevant policies and procedures;
- provide guidance to employees on predicted areas of risk;
- code should be displayed in an aesthetically appealing format to encourage readership;
- provide employees with readily available tools to assist them to make ethically acceptable decisions, and

- provide an appropriate reporting mechanism which employees could use to report or request guidance about concerns, without prejudice to themselves.

A code of conduct is essential to ensure that all employees commit to a single standard of high ethical culture within an organisation, without any double standards and selective application.

4.4.1.3 Employee and Third Party Due Diligence

A requisite aspect of maintaining a sound ethical culture is ensuring that an organisation employs people of high integrity. This would include conducting business with suppliers and clients who are also committed to operating in an environment of high integrity. According to KPMG (2006:12), conducting due diligence on potential employees, suppliers, clients and other stakeholders is an integral part of a fraud prevention strategy. Due diligence should be undertaken at the commencement of an employment or business association process. The prevailing conditions under which employees achieved their performance targets should be scrutinised in order to ensure that the results were achieved within the ethical standards of the organisation. This would send a clear message to employees that the organisation is cognisant not only the results but how they were achieved (KPMG; 2006:12). As the old adage goes “*the end should not justify the means*”: in fraud prevention, this must be understood.

4.4.1.4 Communication and Training

KPMG (2006:12) suggests that it is essential for employees to be made aware of their responsibility in respect of internal controls that are designed to combat fraud. Communication and training should be provided to employees in a planned and prioritised manner in order ensure that the importance of their responsibilities in this regard is emphasised. It is suggested by KPMG (2006:13) that the communication and training initiatives in respect of fraud awareness should be:

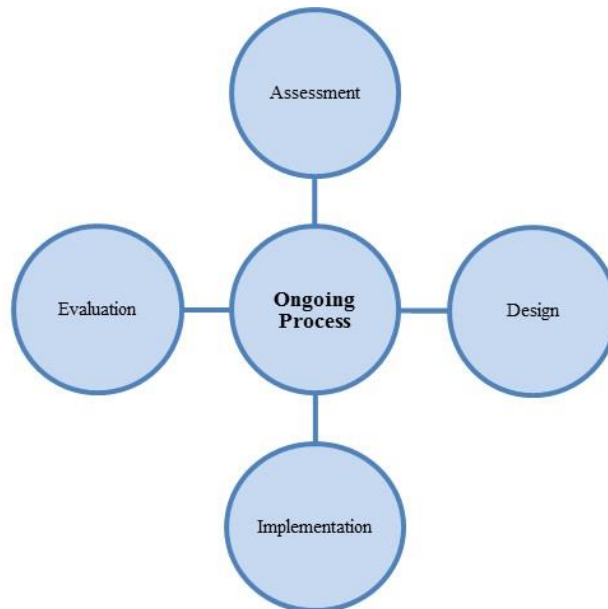
- all inclusive, taking into consideration the responsibilities of a job and the area of risk;
- included, where possible, with other training and communication initiatives;
- conducted using various media and techniques, and
- ongoing, targeting employees where potential risks exists.

Providing continuous communication and training to employees to create awareness about fraud, serves to inculcate a culture of high integrity and compliance within an organisation. Such a process also serves to equip employees to be able to identify fraud within their work environment, and to be aware how to report such suspicion.

4.4.2 An Ongoing Process

It is suggested by KPMG (2006:20) that a fraud risk management strategy is a tool which management utilises in order to manage risk within the organisation. The management of fraud risks is an ongoing process which requires constant intervention. According to KPMG (2006:20), this process comprises four phases. The model reflected below in Figure 4.9 was adapted for this study from the KPMG Fraud Risk Management model (2006:20):

Figure 4.9: Adapted from the Fraud Risk Management model



Source: KPMG (2006:20)

4.4.2.1 Assessment

KPMG (2006:20) suggests that the assessment phase takes into consideration what the organisation expects from the mitigating internal controls that were implemented to address fraud risks, and also assesses whether those internal controls are adequate and effective. The fraud risks faced by organisations differ from each other, and require specific interventions that address those risks. The objective is to create a balance between the risk and internal control. Due to the continuous evolving nature of fraud risks, organisations are faced with the possibility that internal controls that were implemented previously may not be adequate or

effective today. It is essential to identify what are the current fraud risks and how they are being mitigated. The assessment phase should consider which relevant people, processes and systems should form part of the analysis process. Relevant stakeholders should be included in the team conducting the assessment. Once the organisation establishes the current state of internal controls, it should then identify what the desired state is and set milestones for the enhancement of internal controls. The deficiencies that are identified between the current and desired states should be taken into consideration when planning the next steps (KPMG; 2006:20).

4.4.2.2 Design

The design phase involves crafting internal controls that address fraud risks in a holistic manner, such as prevention, detection and responding to fraud risks. These controls should be aligned to legal and other regulatory frameworks and based on best practice. The objective is to design internal controls that safeguard the organisation from fraud risks. KPMG (2006:20) also suggests that the organisation should take into consideration the unique nature of its operating environment and design custom made internal controls. This suggests that there is no “*one size fits all*” approach from an internal control perspective. Organisations are unique as the fraud risks they face. According to KPMG (2006:21), organisations are remiss if they merely design and implement controls to satisfy minimum criteria that are set by regulatory frameworks. Organisations should consider other best practices that are being used by similar types of organisations, where those internal controls were found to be adequate and effective. This will assure management that such best practice is likely to successfully address fraud risks in their organisation.

4.4.2.3 Implementation

Implementation of new or enhanced internal controls requires a structured approach. Responsibility for the internal controls should be assigned to employees who have an appropriate level of authority and seniority, as well as the required resources to give effect to the controls. KPMG (2006:21) suggests that there should be concise and regular communication to the relevant employees about when, how and by whom the new internal controls would be implemented. It will also be opportune, in this communication, to emphasise how compliance will be imposed.

4.4.2.4 Evaluation

The evaluation phase involves the appraisal or review of the design, adequacy and effectiveness of the internal control. The evaluation is conducted by means of a self-assessment of the internal control, testing for functionality, ongoing monitoring and individual evaluations (KPMG; 2006:20). The existence of an internal control does not mean that it is adequate and effective. It is suggested by KPMG (2006:21) that internal controls which have been in existence for a long period of time should be reviewed to ascertain whether it is still working as intended. The review of internal controls should be prioritised based on the profile of the risk that it is intended to mitigate. Compensating controls also contribute to risk mitigation, where a particular internal control may be found to be inadequate or ineffective.

KPMG (2006:21) urges organisations to consider the regulatory imperatives together with best practices in the relevant industry when evaluating and designing new internal controls. The best practice in the relevant industry would reveal which internal controls work well to mitigate fraud risks. Other similar organisations in that industry should compare their existing internal controls with the best practice. The shortfall or gap between the two scenarios should guide any control enhancements that may be required. Consideration should also be given, when conducting the evaluation, to whether internal controls have been properly implemented or not.

Organisations that design and implement a code of conduct do not necessarily have a high ethical culture. It is suggested by KPMG (2006:22) that employees may not be executing their tasks in line with the code of conduct. Having an internal control should not be a “*tick box*” exercise but rather a process that guides employee activities in risk mitigation. The Oxford Dictionary (2014) defines “*tick box*” as “*denoting or relating to a procedure or process carried out purely to satisfy convention, rules, or regulations*”. Fraud prevention in all its complexity requires more than this simple check.

According to KPMG (2006:22), there are other ways to evaluate control effectiveness. Firstly, it is by conducting forensic analysis of relevant data. Secondly, it is by conducting a survey among employees in order to establish the perceptions about fraud risks within the organisation. Such a survey would be valuable in determining the status of control effectiveness. Evaluating the effectiveness of controls and responding thereto is an ongoing

process, according to KPMG (2006:22), which is dictated by changes in the environment in which an organisation operates. These changes could be influenced by the markets, external scrutiny, regulatory or legislative factors (KPMG; 2006:22). The process to design and implement initiatives, to address employee fraud and prevention strategies at universities in KwaZulu-Natal, should certainly include consideration of these aspects.

4.5 SUMMARY

The need to address fraud has been in existence from at least 500 B.C. Fraud prevention has evolved since those early times as it has kept pace with the changing landscape of economic activity and changing fraudulent schemes. This chapter has highlighted the need for the prevention of fraud as an essential initiative in the fraud risk management strategy of an organisation. The need for a sound ethical culture within an organisation has been emphasised by the various fraud risk management models elaborated on in this chapter. In the quest to inculcate a sound ethical culture, it is essential for an organisation to design, implement and communicate a code of conduct/ethics among all employees, clients, suppliers and other stakeholders. The leadership of the organisation should be responsible for setting a high standard of ethical behaviour and leading by example.

The existence of current legislation, regulatory frameworks and anti-fraud organisational policies and procedures contributes towards the prevention of fraud because violation of these poses serious consequences to perpetrators of fraud. This serves as a deterrent to potential fraudsters. The significance of whistle blowing mechanisms has been emphasised globally as an essential fraud prevention initiative. Although whistle blowing is reactive in nature, it serves as a deterrent (threat) to potential fraudsters that they could be reported for suspicion of committing fraud. The various fraud prevention models and frameworks that were examined in this chapter have served to highlight certain common themes that exist between them. These are expounded further in Chapter Nine of this study. Internal controls are an essential arsenal in the fight against fraud but are not the only anti-fraud intervention that is relied on by an organisation. In the following chapter, attention turns to internal controls as they relate to fraud prevention.

CHAPTER FIVE

HISTORICAL AND CONTEMPORARY PERSPECTIVES OF INTERNAL CONTROL

5.1 INTRODUCTION

The previous chapter has highlighted that internal controls are an essential ingredient in the prevention of fraud and error within an organisation. A common theme that has emerged in the previous chapter is that internal control should not be the only intervention that management implements to prevent fraud from occurring. There are other interventions that should be implemented, in conjunction with adequate and effective internal controls, in order to make an organisation less likely to become a victim of fraud. Internal control remains an integral contributor towards fraud prevention. Various relevant legislation and frameworks have been implemented globally, which illustrates the significance of internal control as an intervention mechanism in combating the risk of fraud. An example is the Cadbury report (1992:27), which suggested that an effective system of internal control is essential for the efficient management of an organisation.

The Companies Act 71 of 2008 obliges an audit committee of an organisation that has shareholders, excluding non-profit and state-owned companies, to submit a report, which should be included in the annual financial statement, *inter alia*, about the state of internal financial controls within the organisation. Apart from ensuring the existence of internal controls, it is also essential that the controls are adequate and effective and working as intended. In this regard, KPMG (2011:10) found that fraudsters had increasingly exploited poor controls to commit fraud. The results of the KPMG survey reflected an increase in this type of exploitation from 49% in 2007 to 74% in 2011. In this chapter, internal control is expounded, along with its objectives, the value it provides and its limitations. Internal control is particularly relevant to employee fraud and prevention strategies at universities in KwaZulu-Natal. The COSO Internal Control Integrated Framework is elaborated on, as it is globally regarded as authoritative on the subject of internal controls.

5.2 DEFINITION OF INTERNAL CONTROL

The International Standard on Auditing (ISA, 2009:264) defines internal control under the ISA 315 statement as “*The process designed, implemented and maintained by those charged with*

governance, management and other personnel to provide reasonable assurance about the achievement of an entity's objectives with regard to reliability of financial reporting, effectiveness and efficiency of operations, and compliance with applicable laws and regulations." COSO (2013:1) defines internal control as *"a process, effected by an entity's board of directors, management, and other personnel, designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting, and compliance."*

Jackson and Stent (2010:5/3) show that the definition of internal control by the South African Institute of Chartered Accountants (SAICA) is similar to the definition provided by COSO.

According to COSO (2013:1), the definition of internal control highlights five essential aspects which indicate that internal controls are:

- aligned with the activities of operations, reporting and compliance in order to achieve the objectives of an organisation;
- a continuing process of tasks and activities;
- put into effect by people;
- expected to provide reasonable assurance to the board of directors and management that objectives will be achieved, and
- flexible to ensure applicability to the entire organisation.

5.3 INTERNAL CONTROL THEORY

According to Lee (1971:150), much has been written by authors in the accountancy fraternity about internal controls since the eighteenth century, leading to a misperception that internal controls only came into existence then. Auditing and accounting, according to Lee (1971:150), have been in existence and were actively practised in established economies before the birth of Christ (B.C.). According to Stone (1969:284), the early indication of forms of internal control and auditing is found in the annals of the Mesopotamian civilization between the period 3600 to 3200 B.C. Stone (1969:284) avers that it was during this period that the Sumerians recorded business transactions on stone and later on clay tablets around 3200 B.C. It is the first indication that internal auditors as well as activities of internal control were in existence during these ancient times. *"It was customary for summaries to be prepared by scribes other than those who had provided original lists of payments. Further, the documents of the period reveal*

tiny marks, dots, ticks and circles at the side of the figures, indicating that checking had been performed” (Most, 1959:563).

Lee (1971:151) suggests that managers of that era understood the need for internal controls and how these should be implemented, especially with regard to segregation of accounting duties. According to Brown (1905:21), the scribe of the Royal Treasury of the Egyptian Pharaohs took meticulous care to record details of the amount received, from whom received, the date and how it was utilised. These records related to the receipt of corn, dates, and oxen among other things. *“Nothing was given out of the treasury without a written order. Peculation on the part of the workmen was taken into consideration resulting in one official checking the records of another.”* Peculation is defined in the Merriam-Webster Dictionary (2015) as to *“embezzle”*. *“When the corn was brought to the storehouses each sack was filled in the sight of an overseer and noted down, and when the sacks were carried to the roof of the storehouse and emptied through the receiving opening the scribe stationed there recorded the number received”* (Brown, 1905:21). These rudimentary forms of internal control indicate that there was a need at that point in time to take preventative steps to avoid fraud and error. The use of this system, according to Brown (1905:21), is depicted on the tomb of Chnemhôtep in Egypt.

The current prevalence of fraud at universities in general requires remedial interventions and at universities in KwaZulu-Natal, which are part of contemporary complex and sophisticated business environments, specific attention is required.

5.3.1 Internal Control during the Roman and Greek Empires

According to Brown (1905:25), the Greeks had strict regulations to deal with fraud, but the spirit of administration was poor. There were checking clerks in the Greek cities at approximately 500 B.C. who served as a form of internal control over the receipt and expenditure of government funds. The checking clerks were public officials who were required to scrutinise and verify the transactions relating to government funds. Brown (1905:25) further states that the accounts that were compiled by the public officials were engraved onto stone, and displayed in public as a form of transparency regarding the process. According to Stone (1969:285), the early Greek civilisation did not want any form of formal accounting practices. Internal auditing did not play a significant role in the Greek society at the time.

The Romans, according to Lee (1971:152), were aware of the need for internal control. In this regard, Brown (1905:25) points out that the Romans implemented internal controls for the collection of taxes. The internal control involved the segregation of duties of the individual who imposed the taxes and authorised the expenditure on the one hand, and the individual who received and made payments, on the other. The segregation of duties is relevant in employee fraud and prevention strategies at universities in KwaZulu-Natal.

Brown (1905:31) as quoted by Lee (1971:152), summarised the internal control system that was in existence during the rule of the Roman Republic, as follows:

- The Senate was responsible for overall control over public revenue and expenditure;
- Consul and censors were entrusted with the administration and authorisation of these receipts and payments and accountable to Senate;
- The physical collection of receipts and effecting of payments were allocated to the quaestors of the treasury. The Merriam-Webster Dictionary (2015) defines quaestors as “*one of numerous ancient Roman officials concerned chiefly with financial administration*”; and
- All expenditure was ordered and authorised by a magistrate based on an official order, with supporting documents as proof of the existence and liquidity of the debt, the title of the creditor, and the execution of the work indicated on the order.

According to Brown (1905:32), all these regulations and internal controls contributed to the prevention of fraud. In cases where the fraud did take place, the regulations assisted in prosecuting those implicated. Since the sixth century financial abuse became prevalent, which resulted in new laws being passed such as the Calpurnian law in 149 B.C., the Cornelian law of Sulla and the Julian law of Augustus (Brown, 1905:32). Fraud has been in existence since these early years.

5.3.2 Tally Stick

The internal control dealing with the segregation of accounting duties came into existence during the dark ages, which was the period 1100 to 1200 A.D. (Lee, 1971:151). According to Lee (1971:154), a wooden “*tally stick*” was used during that period and served as a form of a financial receipt within the public and private sectors. Robert (1966:78) as quoted by Lee

(1971:154) suggests that the tally stick served as an internal control for transactions. The manner in which the tally stick was used was that notches were made on the stick which was a method to reflect to reflect the value of completed transactions. Differing values were depicted by different notches. According to Brown (1905:42), the notches represented pound, shilling and pence. After the transactions were completed, and the tally stick was appropriately notched, it was split in two. Each half was retained by the transacting parties.

The tally stick was used as an internal control where public officials, such as the Exchequer in England, were held accountable for the collection of taxes and spending of public funds. These public officials accounted for the money received by means of the tally stick. This system can be compared to the current petty cash system in use by universities and other organisations, where cash used is accounted for by means of receipts produced.

There were two reasons why wooden sticks were used. Firstly, they were durable and legible. Secondly, they were simple enough for illiterate people to use. The tally stick served as evidence of what a person owed another or what amount s/he was due. According to Lee (1971:154), the internal control involving the tally stick is evidence that there was an effort by people entrusted with public funds, to ensure that fraud and error were prevented when receiving funds or making payments. This ancient form of internal control indicates that fraud and error posed a risk in these formative years. The photograph depicted in Figure 5.1 below shows the various types of tally sticks that were in use by the Exchequer at the time:

Photo 5.1: Medieval Exchequer Tallies.



Source: The National Archives, United Kingdom (2014)

5.3.3 Pipe Roll

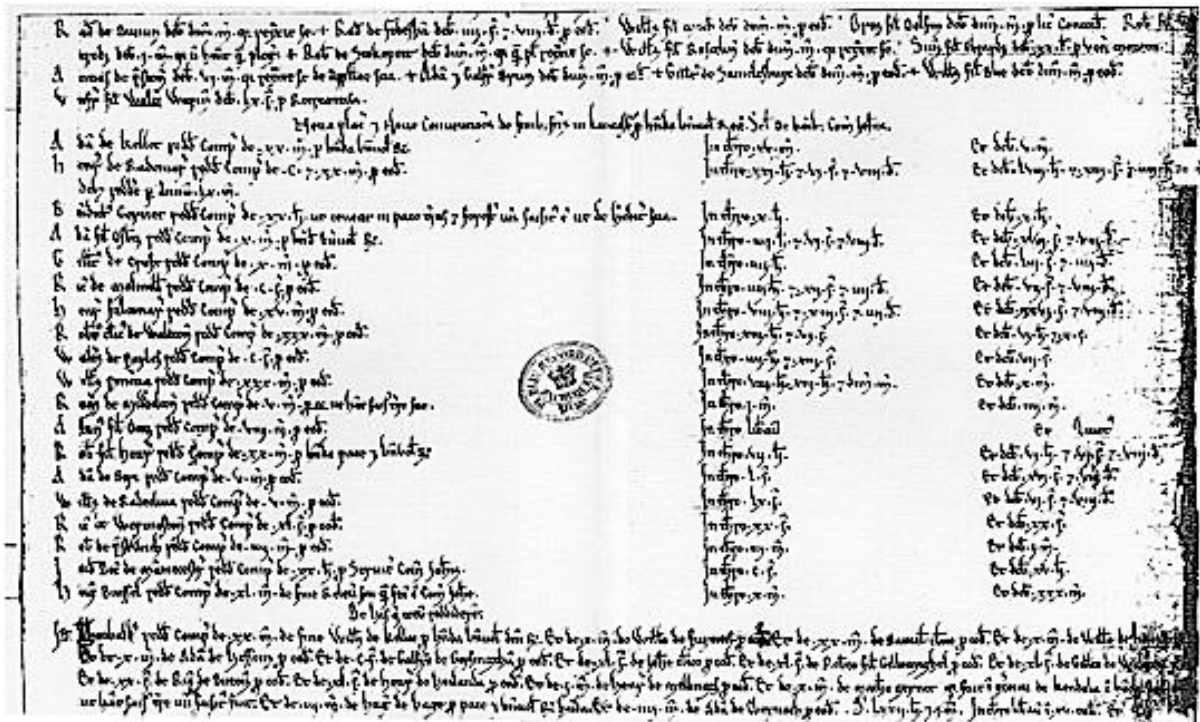
Lee (1971:154) holds that in England, a Pipe Roll was used to maintain a record of the revenues collected, as well as to compare them with the costs incurred during the period 1100 to 1135 A.D. Brown (1905:42) provides a description of the aspects that constituted controls in respect of the pipe roll. There were six control aspects. First, all large amounts of revenue that were due to the Crown were reflected in the “*Domesday Book*”; and this information was used to prepare the Pipe Roll. Second, there were only three copies of the Pipe Roll prepared which were compiled independently on an annual basis by the treasurer, the chancellor’s clerk and by a selected representative of the King. Third, the three copies of the Pipe Roll reflected the particulars pertaining to the revenue due to the Exchequer as well as the actual revenue received and payments that were made during the year. Fourth, there were sheriffs who were tasked with the collection of revenue within their jurisdictions. They had to justify to the Exchequer how much they had collected annually at Michaelmas by producing the tally stick as well as the supporting vouchers as evidence of transactions made during the year. The supporting vouchers were recorded and evaluated against what was previously reflected as due in the Pipe Roll. Fifth, an interim payment would have been made by the sheriff at Easter and a

tally stick would have been issued to the sheriff as proof of the revenue paid in. Sixth, the three copies of the Pipe Roll were subjected to an audit by officials called “*Auditores Compotorum Scaccarii*”.

This form of internal control had the effect of managing the risk of revenues received by the Exchequer as well as collecting the revenues that were due. In the present day, universities receive funds from the government, donors and fees from students for tuition. This ancient control method of safeguarding funds is of relevance to employee fraud and prevention strategies at universities in KwaZulu-Natal.

A photograph of a Pipe Roll that was in use in 1194 A.D. is found in Figure 5.2 below:

Photo 5.2: A Page of a Pipe Roll from the Year 1194 A.D.



Source: Wikipedia (2014)

5.3.4 Middle Ages

According to Lee (1971:155), internal audit was later promoted during the Middle Ages as a preferred way in which to control private businesses. The audit was conducted by the owners of the estates or by people who they had appointed to conduct the internal audit. Oschinsky (1956:91-98) as quoted by Lee (1971:155), avers that teachers of accounting at the time advocated using internal audits as a means to determine whether financial records of the

businesses had been drawn up fraudulently. Examples quoted were that the internal auditor was required to audit in relation to the amount of salt used for salting a given quantity of meat. The auditor would verify the hides and fleeces of cattle that had died during the year and compare corn yield in relation to seeds provided and the extent of land in which it was cultivated. These measures were aimed at preventing fraud and error.

Brown (1905:99) postulates that businesses were rapidly undergoing change during 1300 A.D., which required a modification of the internal control processes. As businesses grew it became relevant to improve the accounting procedures to keep up with the changing business landscape. This led to double-entry bookkeeping emerging as an internal control technique as well as a method to maintain a record of business transactions. The first record of double-entry dates back to 1340 in Genoa. Geijsbeek (1914) as quoted by Lee (1971:156), states that during the late fifteenth century, internal controls such as the following were in practice:

- thorough cross-referencing of bookkeeping entries;
- the appointment of a mercantile officer who acted as registrar in each town for all accounting books for businesses in the town. The registrar maintained a register of all accounting books issued to businesses and ensured that no duplicate books were kept by businesses;
- in order to prevent fraud, a stores ledger account was maintained for every store of goods, and
- any form of erasure in accounting books was prohibited. All alterations had to be done by a further entry.

According to Brown (1905:78), accounts were frequently audited during the fourteenth and fifteenth centuries. Evidence of this is observed during 1298, where the accounts of the city of London were audited by its mayor, aldermen and sheriffs. The city of Dublin was audited by the burgesses or the Earl of Desmond during 1333. During 1346, the accounts of The Worshipful Company of Pewterers were audited by selected company employees in London. An audit of the Burgh of Peebles was held in the presence of the provost, council and inhabitants of the Burgh during 1457. Auditing is particularly relevant to employee fraud and prevention strategies at universities in KwaZulu-Natal.

5.3.5 Internal Control During the 16th and 17th Centuries

Geijsbeek (1914:12) refers to Simon Stevin, who was born in 1548 near Antwerp in the Netherlands. Stevin was multi-skilled in that he was an engineer, accountant, writer and auditor, among other things. According to Geijsbeek (1914:12), Stevin wrote a book “*Verrechning Van Domeine*” in 1604, in which he explained the many forms of internal control methods. Some examples were:

- The pay roll of soldiers and public officials were sent directly to the auditors for checking;
- The cook, who prepared meals for these soldiers and public officials, reported independently to the auditors about the number of meals they served;
- In order to prevent errors and theft when collecting taxes and rents, the sub-treasurer reported to the general treasurer monthly about the receipt of cash and expenditure as well as about people who were not making their payment.
- Arrear rent was reported monthly to the general treasurer so that the property of the defaulter could be sold or other suitable payment agreed upon.

According to Lee (1971:157), there are other examples which prove that internal controls were regarded as an essential aspect of the book-keeping process. Some examples of this are:

- Jan Yamey Christoffels who published a book in 1547, wherein he suggested that the pages of accounting books should be numbered to prevent fraud and error.
- Gerald Malynes wrote in *Lex Mercatoria* in 1656, that fraud could be prevented if no spaces are left between journal entries.

Internal control as a method to prevent fraud and error is relevant today, particularly in respect of employee fraud and prevention strategies at universities in KwaZulu-Natal.

5.4 INTERNAL CONTROL IN THE 21ST CENTURY

Internal control has evolved over the centuries to what it is currently. Various authors have published widely on the issue of internal control in the recent past. According to Rae and Subramaniam (2008:106), internal control is a critical corporate governance apparatus in organisations. COSO (2013:4) states that standards, structures and procedures constitute the internal control environment of an organisation. Wells (2001:90) suggests that internal controls

are insufficient to prevent fraud from taking place because they only reasonably assure the board of directors and management, and also because there are not many internal controls which cannot be manipulated by fraudsters. KPMG (2011:10) reports a significant increase in the number of incidents where weak internal controls were exploited by fraudsters. While Rae and Subramaniam (2008:104) suggest that a key deterrent of fraud is internal control, fraud continues to occur in organisations. Shah and Usman (2013:2) propose that factors such as internal control coupled with the education of staff and clients is essential to prevent fraud. Flostoiu (2012:25) believes that a fraudster has profound knowledge about the activities of a company including its internal control environment and its weaknesses. This makes a fraudster a risk to an organisation unless internal controls are robust enough to prevent fraud from occurring or at least detect fraud shortly after it occurs. Flostoiu (2012:27) asserts that internal control is the most appropriate mechanism to prevent fraud from occurring. Albrecht (1998:111) believes that a significant factor that facilitates fraud is not the lack of internal controls but rather the failure to uphold existing controls. According to KPMG (2011:21), internal control weaknesses increasingly contribute to the commission of fraud. The view of KPMG (2011:21) is that an organisation should make itself resistant to fraud and improve its fraud prevention programmes.

According to Wells (2002:28), fraud can be prevented with the implementation of fundamental internal controls as well as through audits and appropriate oversight. KPMG (2013:3) suggests that fraudsters are constantly creating new ways to commit fraud and organisations should respond with appropriate ways to defending themselves from this. KPMG (2013:6) argues that, although internal controls are essential, controls are reliant on human beings to function.

Seidman (2002:415) argues that frauds are frequently discovered, not by internal controls or auditing techniques, but by chance. Kaymaz *et al.* (2011:171) take the stance that a sound corporate culture, coupled with effective internal controls, are essential against employee fraud. KPMG (2011:21) emphasises that the challenge for companies is determining how to tighten controls and prevent fraud from occurring and also detect and investigate fraud that has already occurred. The survey by KPMG (2011:10) also found a significant increase in cases where deficient internal controls were exploited by the fraudsters, escalating in 2007 from 49% to 74% during 2011. Haugen and Selin (1999:340) assert that weak internal controls create the opportunity for fraud to be committed. Internal controls are an essential intervention in preventing fraud, but may not be the only intervention required in the prevention of fraud.

Internal auditors are generally not skilled to detect fraud. According to Flostoiu (2012:27), an internal auditor does not have expertise in the detection and investigation of fraud. Organisations cannot rely entirely on their internal audit department to detect or investigate fraud. The onus is on management to devise appropriate and adequate systems of internal controls aimed at preventing and detecting fraud.

In managing risks, COSO (2013:1) avers that internal controls assist organisations in achieving, maintaining and improving its performance. COSO also believes that its framework provides management and the board of directors of an organisation, with guidance to appropriately address risks with a specific focus on fraud prevention measures. Similarly, the Institute of Directors Southern Africa, suggests in King III (2009:44) that management should ensure that internal controls are adequate and effective in preventing fraud. KPMG (2011:21) supports this view and believes that organisations should tighten internal controls and prevent fraud from occurring as well as detect and investigate fraud, should it occur. It is management's responsibility to adequately implement internal controls to manage fraud risks. Albrecht and Schmoltdt (1988:18) argue that a lack of segregation of duties between employees has resulted in many frauds.

There is clearly a need to prevent frauds from recurring in the workplace. The Chartered Institute of Management Accountants (CIMA, 2008:24) suggests that the implementation of adequate internal controls, policies and procedures, and fraud awareness initiatives will contribute to the prevention of fraud. CIMA (2008:24) asserts that fraud prevention is the cornerstone for the sustainability of an organisation but many have not adopted an appropriate stance for the prevention of fraud. The recovery of stolen funds from the perpetrator or through insurance is most often low (CIMA 2008:24). This suggests that prevention is better than cure.

Jackson and Stent (2010:5/3) suggest that there are four aspects of internal control. First, internal control is an ongoing process and not an end state. Second, people are required to give effect to the internal control. Third, internal control can only provide reasonable assurance that the desired objectives set by management will be achieved. It does not provide absolute assurance. Lastly, internal control is intended to provide reasonable assurance to the board and management about the achievement of objectives in three inter-related categories, namely:

- economy, efficiency and effectiveness of its operations;

- internal financial control, and
- compliance with applicable laws and regulations.

Internal controls are essential to organisations because of their contribution towards the safeguarding of assets against fraud and error. This section is pertinent when considering employee fraud and prevention strategies at universities in KwaZulu-Natal. In order to prevent fraud organisations should devise and implement other measures as well because internal controls alone will not deter a resolute fraudster.

5.4.1 Elements of Internal Control

According to a report by The Financial Reporting Council (2005), commonly referred to as the Turnbull Report (2005:7), the elements of a sound system of internal control include the organisation's policies, procedures, tasks, behaviours and other activities which enable it to:

- operate effectively and efficiently while addressing risks such as business, operational, financial, compliance and others which prevent the organisation from achieving its objectives, including protecting assets from fraud, loss and abuse;
- ensure appropriate quality of reporting based on sound information, and
- ensure compliance with legislation, regulations, policies and procedures.

Turnbull (2005:7) suggests that the control environment is determined by the internal control system implemented by an organisation within its operational structure, which includes control activities, procedures that impact information and communications, and the process of monitoring.

According to Turnbull (2005:7), the system of internal control of an organisation should:

- be consolidated within its culture and operations;
- have the capacity to promptly adapt and respond to emerging risks, and
- have laid down reporting mechanisms for employees to report control deficiencies as well control enhancements.

Turnbull (2005:7) postulates that robust internal control systems are able to minimise the effects of risks associated with bad decision-making, error, circumvention of controls, overriding of controls and other unforeseeable situations, but is unable to totally eradicate

risks. According to Turnbull (2005:8), an organisation receives reasonable assurance from a robust internal control system. Absolute assurance cannot be provided to an organisation that it will achieve its set objectives.

According to Jackson and Stent (2010:5/4), the ISA statement 315 highlights five components of internal control. They components are made up of the control environment, risk assessment, control activities, information and communication system and monitoring activities. These five components are elaborated on in more detail further in this chapter.

5.4.2 Objectives of Internal Control

Jackson and Stent (2010:5/4) suggest that there are five objectives of internal control. Management designs and implements policies and procedures which assist them to achieve objectives in an effective and efficient manner. The objectives of internal control are to ensure that:

- there is adherence to laid down policies and procedures;
- assets are safeguarded against abuse and theft;
- fraud and error are prevented and detected;
- accounting records are accurate and complete, and
- financial and other information is prepared timeously so that reliance can be placed on it to run the organisation.

5.4.3 Characteristics of Internal Control

In the quest to design and implement a robust system of internal control, the ISA 315 statement set out seven essential aspects to achieve sound internal controls. The characteristics of an organisation with sound internal control, according to ISA (2009:289), are:

- Integrity and sound ethical values are communicated and enforced;
- Management displays commitment to ensuring that there are competent skills and knowledge for specified jobs;
- Individuals that responsible for governance remain independent from management, possess the appropriate experience, are involved and receive adequate and timely information, scrutinise activities, ask the difficult questions and interact with internal and external auditors;

- The business philosophy and style of management encompasses sound risk taking, financial reporting and interaction with accounting functions and related staff;
- Organisational structure is geared to plan, execute, control and review activities aimed at achieving its objectives;
- Authority and responsibility are allocated to employees together with established reporting lines and authorisation regimes, and
- Policies and procedures pertaining to human resources, for example recruitment, training, counselling, promotion and compensation, are in existence.

5.4.4 Limitations of Internal Control

Jackson and Stent (2010:5/4) aver that absolute assurance that internal controls will ensure that the objectives of an organisation will be achieved, cannot be given. This is due to the inherent limitations of internal controls. COSO (2013:137) similarly postulate that internal controls can only provide reasonable assurance to the board and management that the organisational objectives will be met. According to Jackson and Stent (2010:5/5), the limitation on the effect of internal controls is impacted by the following six elements:

- the cost of the internal control versus the benefit to be derived;
- internal controls directed at routine transactions only;
- human error;
- circumvention of internal controls involving collusion among employees or third parties;
- overriding of internal controls by management, and
- internal controls not updated timeously when the control environment changes.

Although there are limitations to internal control, it is particularly essential to employee fraud and prevention strategies at universities in KwaZulu-Natal.

5.5 IIA INTER-RELATIONSHIP MODEL

According to the IIA (2009:19), fraud prevention involves the implementation of relevant policies and procedures, providing training to employees and the communication to employees, by management, in order to educate them about activities that are fraudulent in nature. The IIA (2009:19) holds the view that an organisation will not be able to totally eradicate fraud because

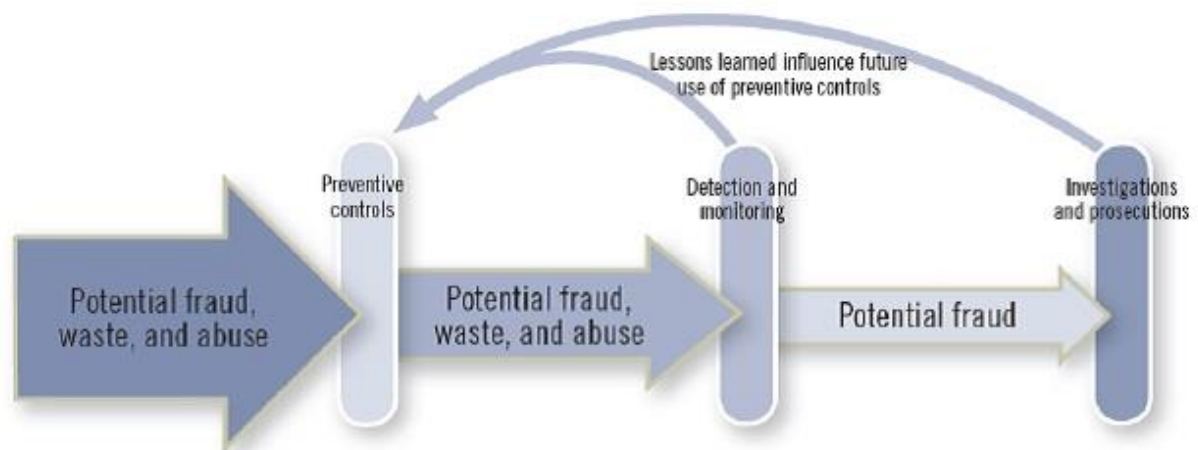
it is not cost effective to do so. Opportunities can emerge for determined employees in any organisation to collude with others to circumvent or override controls in order to commit fraud.

The IIA Inter-relationship Model, which is depicted in Figure 5.1 below, is intended to primarily address fraud. The three-phase approach of this model involves:

- implementation of preventive controls;
- conducting detection and monitoring activities, and
- investigating fraud that has occurred and prosecuting offenders.

The Inter-relationship Model in Figure 5.1 below suggests that lessons learned from detection, monitoring and investigation activities should influence the designing of new or the enhancement of existing preventive controls:

Figure 5.1: Inter-relationship Model



Source: IIA (2009:19)

As a fraud prevention model, this is especially relevant to employee fraud and prevention strategies at universities in KwaZulu-Natal.

5.6 COSO

According to the COSO website (COSO 2014), the organisation was formed in 1985 to sponsor the National Commission on Fraudulent Financial Reporting in the United States of America. This was an initiative that was implemented by the private-sector to establish what root causes led to fraudulent financial reporting by organisations. COSO was sponsored by the following prominent organisations: American Accounting Association, American Institute of Certified Public Accountants, Financial Executives International, Institute of Internal Auditors,

and National Association of Accountants. Due to the fact that the first chairman of this Commission was James Treadway, the Commission was aptly named the “*Treadway Commission*”.

The mission of COSO is to provide leading benchmarks by developing frameworks for enterprise risk management, internal control and fraud deterrence with the objective of improving the overall performance and governance of organisations as well as the reduction of fraud (COSO, 2014). The COSO Internal Control Integrated Framework is cited by various influential organisations on the subject of internal control, as evidenced by some organisations, such as the IIA (2009:20) and the American Institute of Certified Public Accountants (AICPA, 2005:2).

5.6.1 COSO Internal Control Integrated Framework

The COSO Internal Control Integrated Framework was originally issued in 1992. According to the Foreword to the COSO Internal Control Integrated Framework (2013), the original framework that was issued in 1992 is regarded globally as a leading framework to design, implement, conduct and assess the effectiveness of internal control. The framework was revised and updated during 2013. The revision was necessitated by the demands of a changing business environment, such as complexity of business operations, stakeholder expectation in respect of governance, technological advancement and globalisation of markets.

According to COSO (2013:5), there are five components to the COSO Internal Control Integrated Framework, which are applicable to the whole organisation, including different divisions, units or other functions. These components are:

- Control environment;
- Risk assessment;
- Control activities;
- Information and communication, and
- Monitoring activities.

All five constructs of the framework are essential and relevant. For purposes of this study only three constructs were prioritised. These three constructs can be directly linked to the

prevention of fraud, which is the focus of this study. Hence, the following three constructs were chosen for purposes of this study:

- Control environment;
- Risk assessment, and
- Control activities.

The constructs of the COSO Internal Control Integrated Framework enabled the exploration of internal controls, management responsibility as well as the responsibility of auditors and the audit committee. COSO (2013:2) describes internal controls as a process which is implemented by the board and management of an organisation to assure stakeholders that the objectives of the organisation will be achieved. The selected constructs are elaborated on in this chapter as they are pertinent to employee fraud and prevention strategies at universities in KwaZulu-Natal. Figure 5.2 below depicts the Cube that is used by COSO to illustrate the Internal Control Integrated Framework:

Figure 5.2: Internal Control - Integrated Framework Cube

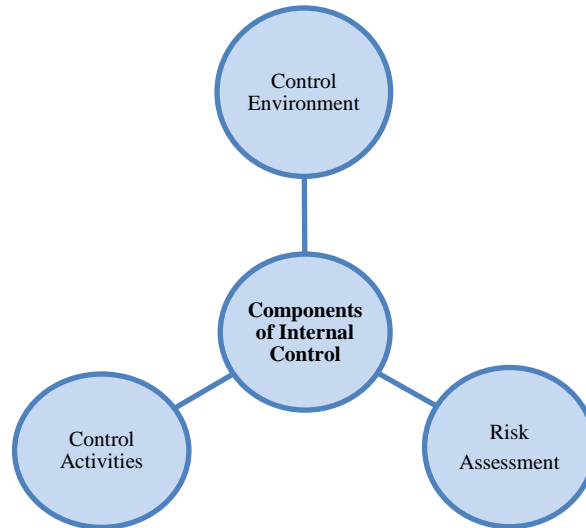


Source: COSO (2013:5)

The COSO (2013:5) framework sets out the three organisational objectives that need to be considered in an internal control environment. These objectives are operations, reporting and compliance and they permeate throughout the organisation irrespective of the varying organisational structure. The internal control process is integrated as each part of it affects the

other parts (COSO 2013:6). According to COSO (2013:12), there are seventeen principles in total that are linked to the five components. There are twelve principles linked to the three chosen components for this study, which are elaborated on further in this chapter. Figure 5.3 shows the components that constitute internal control:

Figure 5.3: Adapted from the Internal Control - Integrated Framework



Source: COSO (2013:12)

5.6.2 Control Environment

The control environment, according to COSO (2013:12), comprises standards, processes and structures which form the foundation upon which internal control is constructed in an organisation. This is augmented by the board and management setting a strong tone at the top about the importance of internal control and level of conduct that is expected from employees. The following five principles underpin the control environment component.

5.6.2.1 Integrity and Ethical Values

The organisation espouses integrity and high ethical values. This principle is premised on the four essential points listed below:

- The tone at the top is set by the board and all levels of management leading by example and acting ethically and with integrity.
- Standards of conduct remind employees and service providers that they are expected to act ethically and with integrity.
- Adherence to the standards of conduct is evaluated during performance reviews.

- Deviation from the standards of conduct is identified and addressed timeously.

5.6.2.2 Oversight

The board exhibits its independence from management and oversees to ensure that internal controls are developed and remain effective and adequate. This principle is premised on the four essential points that are listed below, where the board of directors:

- Establish and accept responsibility for oversight of internal control within the organisation.
- Determine, maintain and evaluate the expertise of its members to ensure that these are appropriate to equip them to ask sceptical questions of management and take corrective action.
- Is made up of independent members who are objective in carrying out their tasks.
- Play an oversight role over the design, implementation, and conduct of internal control by management.

5.6.2.3 Structure, Authority and Responsibility

In order to achieve organisational objectives, management implements an operational structure with clear reporting lines and delegated authority and responsibility to employees; which is overseen by the board. The three points on which this principle is premised are:

- Consideration is given by the board and management to all structures of the organisation that contribute to the achievement of organisational objectives.
- Reporting lines are designed and evaluated by management for all structures.
- It is the role of the board and management to delegate authority, allocate responsibility and segregate duties by means of appropriate systems and processes.

5.6.2.4 Competence

Suitably competent employees are recruited, trained and retained by the organisation in order to achieve its objectives. There are four points on which this principle is premised, which are:

- Policies and procedures are established which indicate the expected competence required.

- The board and management evaluate competence throughout the organisation, as well as service providers, based on extant policies and procedures and rectifies where required.
- Competent employees and service providers are recruited, developed and retained.
- The board and management plan for the succession of employees in essential areas of internal control.

5.6.2.5 Accountability

Employees are held accountable for their internal control responsibilities. There are five characteristics on which this principle is premised. The board and management:

- Establish processes in which to communicate with, and hold people accountable for internal controls and initiate corrective action where appropriate.
- Establish performance measures and rewards for the achievement of objectives.
- Evaluate performance measures and align incentives and rewards with the fulfilment of internal control responsibilities and the achievement of objectives.
- Assess and address pressures that are linked with the achievement of objectives.
- Evaluate responsibility for the performance of internal control, compliance with standards of conduct and the level of competence when remunerating or punishing employees.

5.6.3 Risk Assessment

According to COSO (2013:13), the ongoing process to identify and classify risks is regarded as the risk assessment process which informs the decision-making related to the management of the particular risk based on knowledge about internal and external influences. The following four principles underpin the risk assessment component.

5.6.3.1 Specific Objectives

The specific objectives of the organisation are clearly communicated to enable the identification and evaluation of risks that impact on the achievement of determined objectives. The following thirteen characteristics are related to operations, reporting and compliance:

- Operational objectives are determined by management.
- Management considers the level of risk that the organisation is willing to tolerate.

- Levels of operations and financial performance are communicated by the organisation.
- Operational objectives are considered by management when allocating resources.
- External financial reporting objectives are in line with accounting principles for similar organisations.
- Materiality is taken into consideration when preparing the financial statement.
- External reporting is a reflection of essential transactions and events of the organisation.
- Objectives are determined by considering relevant laws, rules and recognised standards and frameworks.
- Requisite levels of precision and accuracy are considered when reporting.
- Internal reporting entails complete and accurate information about choices made by management and information to operate the organisation.
- Internal reporting objectives indicate the level of precision and accuracy required in non-financial reporting objectives.
- Laws and rules are integrated into the compliance objectives, as minimum standards of conduct.
- Management considers its tolerance for risks in line with its objectives.

5.6.3.2 Identify and Analyse Risk

Risks are identified and analysed throughout the organisation, in order to determine how they should be addressed. The following five characteristics highlight this principle:

- Risks are identified and analysed at all levels, including subsidiaries, divisions, units and functional departments.
- Risks from both internal and external sources are identified and analysed.
- Risk assessment occurs with the involvement of appropriate levels of management.
- Identified risks are analysed for its significance.
- Consideration is given to how a risk should be managed.

5.6.3.3 Fraud Risk

The potential for fraud is taken into consideration during the risk identification and assessment process. The four salient characteristics of this principle are:

- Consideration of various types of fraud such as fraudulent reporting, asset misappropriation and corruption.
- Incentive and pressure to commit fraud are taken into consideration.
- Opportunity to commit fraud is taken into consideration.
- Rationalisation to commit fraud is a means which employees may use to attempt to justify their act.

5.6.3.4 Identify and Analyse Change

Changes that impact the control environment are identified and assessed based on the significance of its impact on internal control. The three essential characteristics are:

- Consideration should be given to changes to regulations, laws, economy and the physical environment.
- Consideration should be given to the impact of new business products, changes to existing products, swift growth, business with foreign organisations and new technology.
- Changes in management and their attitudes towards internal control should also be considered.

5.6.4 Control Activities

The control activities, according to COSO (2013:13), are actions that are determined by policies and procedures implemented by management to ensure risks are mitigated in order to achieve organisational objectives. These activities span across all levels of the organisation, in different stages of the processes and including all technology environments. The following three principles underpin the control activities component:

5.6.4.1 Select and Develop Control Activities

Control activities are identified and implemented by management to assist in the mitigation of spacing risks and achievement of objectives. There are six essential characteristics of this principle, which are:

- Control activities ensure that risk mitigation is carried out.
- Control activities are impacted by the characteristics of the organisation, the operating environment, business complexity, nature and scope of operations.

- Management is responsible for deciding the areas of operation requiring control activities.
- Control activities include various control types as well as a combination thereof.
- Control activities should be considered at various levels within the organisation.
- Incompatible duties should be segregated or alternative controls implemented.

5.6.4.2 General Control Activities over Technology

General control activities are identified and implemented by management over technology to assist in the mitigation of risks and achievement of objectives. These four aspects characterise this principle:

- Determine how dependent the organisational processes are and how they interrelate in terms of processes, automated control activities and technology general controls.
- Management designs controls over technology infrastructure.
- Management designs controls to restrict the access of unauthorised employees to technology and also to protect the organisation from external threats.
- Management designs controls over the procurement, development and upkeep of technology infrastructure.

5.6.4.3 Policies and Procedures

Policies and procedures are implemented to ensure that organisational objectives are achieved. There are six characteristics that underpin this principle, namely:

- Management designs policies and procedures which stipulate the processes and routine employee activities required to achieve its objectives.
- Accountability and responsibility are assigned to relevant levels of management for control activities.
- Control activities are carried out timeously by responsible employees as prescribed in the policies and procedures.
- Corrective action is taken by responsible employees after they investigate issues emanating from control activities.
- Competent employees are deployed to perform control activities on an on-going basis.

- Policies and procedures are reviewed on a regular basis and amendments are made where appropriate.

The COSO Internal Control Integrated Framework is particularly relevant to employee fraud and prevention strategies at universities in KwaZulu-Natal.

5.7 SUMMARY

This chapter provided an overview of the evolution of internal control over the past centuries, albeit in various forms. This chapter has also highlighted that internal control is an essential intervention in addressing employee fraud and prevention strategies particularly at universities in KwaZulu-Natal. To address employee fraud, various pieces of legislation and frameworks have been designed and implemented throughout the world over the years. A significant requirement of the various legislation and frameworks is the need for designing and implementing sound internal control systems that are adequate and effective. The COSO Internal Control Integrated Framework, with its various components and principles, is especially relevant to employee fraud and prevention strategies at universities in KwaZulu-Natal. Complementing the discussion on internal controls, the following chapter elaborates on corporate governance and the manner in which it relates to employee fraud and prevention strategies at universities in KwaZulu-Natal.

CHAPTER SIX

PERSPECTIVES OF CORPORATE GOVERNANCE

6.1 INTRODUCTION

This chapter elaborates on the history and relevance of sound governance within organisations. It is essential to delve into the past in order to obtain an understanding of the historical circumstances which have influenced modern-day corporate governance. In this chapter, relevant legislation is expounded as pertinent to the governance of universities in South Africa. The Batho Pele principles (2010:77) are explained with specific relation to ethical conduct, including the African Charter (2011:7) on ethical behaviour. This chapter also elaborates on sections of The South African National Development Plan 2030 (NDP), insofar as it relates to governance of public higher education institutions. For purposes of this research, four constructs were selected from the King III Corporate Governance Framework because of their reference to employee fraud and prevention strategies at universities in KwaZulu-Natal. These four constructs are ethical leadership and corporate citizenship, audit committees, governance of risk and internal audit. The constructs are expanded on in this chapter.

6.2 CORPORATE GOVERNANCE THEORY

The Merriam-Webster Dictionary (2014) defines govern as “*the way that a city, company, etc., is controlled by the people who run it*”. King (2009:18) defines governance as “*the processes to help directors discharge and be seen to be discharging their responsibilities created by their duties*”. According to King (2009:18), his definition of corporate governance is much more informed than the standard definition that corporate governance is “*the way in which companies are directed and controlled*”. He (2009:1) argues that it does not matter how big or small the entity is; it has to be governed. King (2009:17) posits that a corporate company cannot be equated to a human being insofar as it does not have a mind with which it can think. The company becomes a legal person in law but requires directors in order to operate.

According to the Merriam-Webster Dictionary (2014), responsibility is defined as “*something that you should do because it is morally right, legally required*”. King (2006:4) holds that sound governance of an organisation “*is a journey rather than a destination*”. In essence,

universities in KwaZulu-Natal should consider sound governance as work in progress and not as an event.

Companies in South Africa are bound by the Companies Act 71 of 2008, as well as the King Reports on Corporate Governance in the quest for sound governance. During 1994, Mervyn King, who was a former judge of the High Court in South Africa, formed a committee that developed the King Report on Corporate Governance. This report later became popularly known as King I. The King I (1994) report provides guidelines to organisations on codes of practice and conduct. According to Barrier (2003:69), King I was created after The Institute of Directors in South Africa, as well as the former Johannesburg Stock Exchange, requested Mervyn King to chair a committee.

Barrier reports (2003:69) that the objective of the committee was to look into addressing issues that would hinder former disadvantaged citizens from moving their business activities into the mainstream economy in a democratic South Africa. These citizens had no experience or literature to guide them through this transition. King I advocated an integrated approach where guidelines were provided to boards on how to deal with their stakeholders. It also addressed affirmative action. According to Hendricks and Wyngaard (2010:104), King I recommends that the interests of stakeholders have to be taken into consideration from a sound social, financial, ethical and environmental perspective.

Bendixen and Thomas (2000:65) aver that corporate governance is widely viewed as critical to sound business practice. Brown and Brown (1999:96) are of the view that good corporate results stem from good governance. This view is shared by the Organisation for Economic Co-operation and Development (OECD, 1999:199), which also believes that sound governance will improve corporate performance. According to de Beer and Rensburg (2011:208), the management of stakeholder relationships has the potential to assist an organisation in achieving its predetermined objectives. OECD (1999:199) holds that organisations who fail to adapt to sound governance practices will find difficulty in accessing global capital markets.

The King Committee issued what later became known as King II. According to Hendricks and Wyngaard (2010:105), certain practices which were recommended in King II were incorporated into legislation, namely, the Companies Act 71 of 2008. According to Kakabadse and Korac-Kakabadse (2002:310), King II replicates King I to a large extent and also expands

on it in more detail. King III (2009:16) proffers that the code applies to all entities, irrespective of size or whether they exist in the public or private sectors. It is mandatory for companies that are listed on the Johannesburg Securities Exchange, to apply the principles of the King III code. King III (2009:5) advocates the application of the principles of corporate governance on a comply-or-explain basis, as they most suitably meet the objectives of an entity.

Casper *et al.* (1999:104) hold that there is no “*one-size-fits-all*” approach when it comes to corporate governance. Their comparative study of corporate governance in Germany and Britain revealed that there is no “*one best*” system. Each system has its own advantages. King III (2009:5) supports this view, as the “*one size fits all*” principle cannot be found suitable to each and every company because they are different from one another in various ways.

Corporate governance as a method to prevent unethical behaviour is particularly relevant today in addressing employee fraud and prevention strategies at universities in KwaZulu-Natal.

6.3 HISTORY OF CORPORATE GOVERNANCE

According to Schall (2011:478), the formation of the Dutch East India Company and the English East India Company ushered in the creation of chartered companies which were managed by agents appointed as separate legal entities based on a “*royal charter*”. The legal status of these companies was derived from the King. Schall (2011:479) holds that modern day entities show some semblance to the manner in which chartered companies operated, namely, the separation of powers in running the business in the year 1600. Schall (2011:480) reveals that the East India Company had the same elements of modern-day companies. For example, the company was operated by the Governor and relevant committees were put together. This can be compared to the chief executive officer and the board of directors in modern companies. The East India Company traded under one name, rendering the appointed agents and investors not being held personally liable. Schall (2011:480) concludes that these chartered companies were the earliest indication that there was a separation of powers. This was the origin of a form of corporate governance.

According to King (2006:6), the governing of companies took credence in the latter half of the twentieth century, despite the fact that contemporary companies came into existence in 1855. Schall (2011:478) supports this view that the modern company emerged in the United

Kingdom in 1855. King (2006:6) postulates that it was during the nineteenth and twentieth centuries that companies, which were largely family-owned business, were focused on the profits generated for their shareholders. There was no consideration for the well-being of other stakeholders.

Frederick (2006:5) posits that corporate social responsibility emerged during the twentieth century and became an embedded way of doing business by the end of that century. Between the 1950s and 1970s, businesses faced pressure from stakeholders to conduct business in a socially responsible manner. According to Frederick (2006:5), the protests emanated from widely publicised behaviour by businesses which acted unethically and irresponsibly. It was widely perceived at that time that businesses operated without consideration for the impact they had on society. Frederick (2006:9) holds that Richard Eells coined the phrase “*the well-tempered corporation*” in 1960, when he referred, *inter alia*, to a company which conducted business while being mindful of the societal need for “*good corporate citizenry*”. The original documented use of the term “*corporate governance*” is accredited to Eells (1960:108) to mean “*the structure and operation of the corporate polity*”.

According to Morck and Steier (2005:4), corporate governance is not a standard process throughout the world. There are two issues that impact corporate governance globally. Firstly, there are companies within the United States of America and the United Kingdom that are owned by a wide variety of shareholders, whereas elsewhere in the world large companies are owned by a few wealthy families. Secondly, wealthy families own some companies, which also own shares in other companies, which in turn also own shares in further hundreds of companies, just as in a pyramid. Morck and Steier (2005:4) explain that large family-owned companies pose a challenge to corporate governance in a pyramid scenario.

King (2006:7) explains that during the late twentieth century, American and British shareholders were becoming concerned about the governance of Anglo-American companies. The reason was that the companies that were located in countries in the Far East were performing better than British and American companies in the same industry. The Anglo-American companies had unitary boards with limited stakeholder input, which was in contrast to how companies were governed in the Far East. According to King (2006:8), the emergence of scandals involving BCCI Bank and Robert Maxwell in the United Kingdom, prompted the

country to set up a committee that would design a governance code in respect of financial aspects. The committee was chaired by Sir Adrian Cadbury.

6.4 CADBURY REPORT

Corporate governance gained prominence during 1992 after the Cadbury Report was issued. The Cadbury Report emanated from a committee that was formed during 1991 in Britain by the London Stock Exchange, the Financial Reporting Council as well as the accounting fraternity, to address financial reporting and accountability from a corporate governance perspective. According to Keasey *et al.* (2005:5), the process of reforming the corporate governance environment in the United Kingdom commenced when the Cadbury Committee was formed in 1991.

The committee, which was led by Sir Adrian Cadbury (1992:14), produced the “*Report of the Committee on the Financial Aspects of Corporate Governance*”. This report is popularly referred to as the “*Cadbury Report*”. The Cadbury Report (1992:43) also addresses the issue of fraud and suggests that it is the ultimate responsibility of the board of an organisation, in terms of its fiduciary duties, to prevent and detect fraud. The Cadbury Report (1992:25) stipulates that the Board of Directors is implicitly required to ensure that there are adequate systems of internal control in place to minimise the risk of fraud taking place within their organisations. According to Wixley and Everingham (2002:5), the Cadbury Report is claimed to have been the catalyst in ensuring sound governance by companies within the United Kingdom.

After the Cadbury Report (1992) was issued in the United Kingdom, it was followed by the Greenbury Report (1995), which made recommendations about the remuneration of directors. This report was later followed by the Hampel Report (1998), which focused on reviewing the implementation of the recommendations made in the Cadbury Report. The Turnbull Report (1999), made recommendations about the combined code and internal controls in England and Wales. A revised Turnbull Report (2005) was subsequently issued.

6.5 SOUTH AFRICAN CONSTITUTION ACT 108 OF 1996

The values and principles that govern public administration in South Africa is stipulated in Section 195 of the Constitution of the Republic of South Africa Act 108 of 1996. According to Thornhill (2012:110), Section 195 also sets out the high standard of ethical conduct that is

expected within public service. Public administration is expected to be governed by, *inter alia*, the following basic values and principles:

- Inculcate sound professional ethical conduct;
- Resources should be used efficiently and effectively, and
- There must be accountability within public administration.

In order to give effect to these values and principles they should be reflected in policies within public administration. In this regard Cloete and Wissink (2000:14) conclude that public policy should highlight ethics and values. They postulate that policy management can be considered to be effective through sound management, organisational arrangements and governance. Universities in KwaZulu-Natal should consider the values and principles contained in Section 195 of the Constitution of the Republic of South Africa Act 108 of 1996 when designing or revising related policies that would assist in preventing employee fraud at universities.

6.6 HIGHER EDUCATION ACT 101 OF 1997

According to King (2006:7), governments around the world have compelled companies to be governed in a sound manner by passing relevant legislation to this effect. The intent of government is to criminalise poor governance or a lack thereof by companies. Wixley and Everingham (2002:3) postulate that corporate governance applies to both the private and public sectors. The principles of sound governance are applicable to all entities including universities. The Higher Education Act 101 of 1997 is specifically applicable to institutions that are involved in higher education in both the public as well the private sectors. This Act should be read in conjunction with the Higher Education Laws Amendment Act 21 of 2011.

In dealing with the governance of public universities, chapter four of this Act is relevant as it specifically pertains to the governance of public higher education institutions, such as the four universities that form part of this research. Section 26 (2) of the Higher Education Act 101 of 1997 stipulates that every public higher education institution should form governance structures such as a council, senate, principal, vice-principal, students' representative council, institutional forum and other structures and offices which may be determined by the statute of the specific university.

In terms of Section 27 of the Higher Education Act 101 of 1997, the Council of a public higher education institution is tasked with governing the institution within the ambit of this Act and any other relevant legislation including the statute of the particular institution. Sub-section 27 (7) of the Higher Education Act 101 of 1997 stipulates that members who are elected to serve on the Council of a public higher education institution should be experienced and knowledgeable about governance of the relevant institution. The statute of each public higher education institution, such as the University of KwaZulu-Natal (2014:12), sets out the various functions of Council, including the appointment of senior management. Council delegates the day-to-day administration and management of the institution to the Vice-Chancellor. Such responsibility of the Vice-Chancellor and Principal of the institution is aligned to Section 30 of the Higher Education Act 101 of 1997. The Vice-Chancellor in turn delegates these tasks to the executive management committee of the institution. Council also appoints various oversight committees to assist it in governing the institution. Examples of such committees are an audit and risk committee as well as a finance committee.

Section 34 of the Higher Education Act 101 of 1997 stipulates that the council of the relevant public higher education institution should determine the disciplinary provisions for the institution. Disciplinary provisions are essential in the governance process of a public higher education institution. In instances where there is a violation of policies and procedures or legislation, it is essential that there are stipulated disciplinary processes and sanctions in place for violations or non-compliance.

Section 38 of the Higher Education Act 101 of 1997 pertains to cooperation between public higher education institutions. Of relevance to this research is the need to share best practices with other public higher education institutions. Sub-section 38 (2) stipulates that public higher education institutions may co-operate with each other in any manner to achieve the optimal utilisation of resources and the performance of their functions, and to establish regional or national structures to assist and facilitate co-operation.

In terms of Section 41 of the Higher Education Act 101 of 1997, the Minister of Higher Education requires the council of a public higher education institution to provide a report on the overall governance of the relevant institution. The objective is to assure the Minister that the institution is operated on sound governance principles. This Act should be considered when addressing employee fraud and prevention strategies at universities in KwaZulu-Natal.

6.7 COMPANIES ACT 71 OF 2008

The Companies Act 46 of 1926 was enacted in South Africa to regulate the manner in which companies operate in the country. This act was later repealed and replaced by the Companies Act 61 of 1973. After the dawn of a new democratic political order in South Africa, a new Companies Act was enacted during 2008 and the former Act 61 of 1973 was repealed. There is now the Companies Act 71 of 2008 as amended during 2011. The Companies Act 71 of 2008 sets out various activities which are deemed unlawful and are punishable in terms of this Act. The crime of fraud features under various Sections of the Companies Act 71 of 2008 as amended. The Act sets out, *inter alia*, the responsibility of directors of companies to ensure sound governance within the Board of Companies that they serve. For example, Section 22 (1) prohibits directors from trading recklessly with the intent to commit fraud.

Public higher education institutions are not companies as envisaged in the Companies Act 71 of 2008. This Act is relevant to public higher education institutions with particular bearing on where such institutions have formed companies for the purpose of raising funds for the institution concerned. Section 40 of the Higher Education Act 101 of 1997 provides for a public higher education institution to raise funds. The institution concerned should ensure that companies that are formed to raise funds on behalf of the institution, operate legally and ethically based on sound governance principles.

6.8 PUBLIC MANAGEMENT

Vyas-Doorgapersad (2011:240) holds that systems that are implemented to manage employee performance contribute towards sound governance in the public sector resulting in a paradigm shift to New Public Management (NPM) from New Public Administration. According to Vyas-Doorgapersad (2011:238), NPM is considered to be a management approach which is premised on best practice that is in use in the private sector and implemented within the public sector. Vyas-Doorgapersad (2011:239) proffers that the four popular elements of NPM in African countries are decentralisation, outsourcing, performance contracting and corporatisation. Vyas-Doorgapersad (2011:245) avers that NPM may contribute towards sound governance and sustainable development in African countries that are experiencing a crisis within the public sector. According to Mongkol (2011:40), the NPM concept has been criticised for not being suitable for developing countries, such as those in Africa.

Fox *et al.* (2004:2) hold that public administration should not be “reduced” to public management because public administration is defined in broader terms than public management. They suggest that public management should rather form part of the wide theoretical and practical aspects of public administration. According to Fox *et al.* (2004:2) the prominence of public administration over public management is evident from the curricula that was set by the International Association of Schools and Institutes of Administration (IASIA) for public administration. Of significance to this study is that the curricula should include, *inter alia*, “knowledge of ethical and value systems within which public administrators must operate”. This is in accordance with the views of Cloete and Wissink (2000:14) who suggest that public policy should give significant attention to ethics and values.

The Division of Public Administration and Development Management within the United Nations (2008:70) are tasked with coordinating and implementing a programme on public administration in order to achieve its Millennium Development Goals (MDG) of poverty alleviation and sustainable development. According to the United Nations (2008:71), globalisation has resulted in concerns around governance and public administration among countries. Therefore, the focus of the Governance and Public Administration Branch of the United Nations is, *inter alia*, on ethics, transparency and accountability in public administration. In order to prevent employee fraud at the university it would be essential for management to inculcate an ethical culture.

Ethical behaviour, incompatibilities and conflict of interest as well as the preventing and combating corruption are essential principles which universities in KwaZulu-Natal should consider when designing and implementing strategies to prevent employee fraud.

6.9 AFRICAN CHARTER

The African Charter was adopted by the African Union (AU) in Ethiopia on 31 January 2011. With relevance to this study the preamble to AU African Charter (2011:2) stipulates, *inter alia*, that the Member States are committed to:

- Enhancing professionalism and ethics on the African continent, and
- Promoting the values and principles of good governance in public service.

The African Charter (2011:3) defines ethics in public service as the standards of accountability by which the work and conduct of public servants are evaluated. Chapter 3 of the African Charter (2011:7) was chosen for purposes of this study. It deals with the code of conduct for public servants. Articles 10, 11 and 12 are relevant in particular to this study as they relate to the following:

- Article 10 – Ethical Behaviour;
- Article 11 – Incompatibilities and Conflict of Interest, and
- Article 12 – Preventing and Combating Corruption.

6.9.1 Ethical Behaviour

In inculcating ethical behaviour, Article 10 of the African Charter (2011:7) stipulates that public servants shall in their official capacity:

- Abide by established policies, procedures and ethical codes of conduct;
- Not receive nor request any gifts, donations or rewards in cash or kind, and
- Carry out their official duties impartially and without personal gain.

6.9.2 Incompatibilities and Conflict of Interest

To obviate incompatibilities and conflicts of interest Article 11 of the African Charter (2011:8) stipulates that public servants shall in their official capacity:

- Not participate in transactions where they have vested interests;
- Abide by legislation that prohibits conflicts of interest;
- Not participate in any activity that is incompatible with their functions;
- Maintain confidentiality for documents and information entrusted to them, and
- Not unduly benefit from offices that they had occupied previously.

6.9.3 Preventing and Combating Corruption

In preventing and combating corruption Article 12 of the African Charter (2011:8) stipulates that governments shall:

- Enact legislation and design and implement strategies;
- Ensure that the public service sector makes public servants aware about the anti-corruption strategies that are implemented;

- Implement systems to manage accountability and integrity in the country that are underpinned by ethical values and behaviours, and
- Recognise and reward ethical leadership.

6.10 NATIONAL DEVELOPMENT PLAN 2030

The South African National Development Plan 2030 (NDP, 2012:25) was produced by the National Planning Commission (NPC) which was chaired by Minister Manuel, a Member of Parliament of South Africa. The NPC was appointed by President Zuma in 2010 with the mandate to compile a vision and national development plan for South Africa. The NPC comprised 26 commissioners who had specific expertise in areas that were the focus of the NPC. Since the birth of democracy in 1994 in South Africa, the NDP (2012:25) reflected that progress in the country was stifled mainly because of the failure to implement policies and the absence of broad partnerships in the country.

The NDP highlighted nine challenges for South Africa, one being the need to address the high levels of corruption in the country. The NDP (2012:56) suggests that corruption should be addressed by means of three interventions: prevention, deterrence and education. Firstly, the NDP (2012:56) suggests that prevention, which entails the use of systems, *inter alia*, information technology and audit, makes the perpetration of fraud and corruption difficult. Secondly, deterrence has the effect of letting people know that they are likely to be detected and punished if they are involved in fraud and corruption. Lastly, educating people about social values will assist in emphasising that corruption is dishonesty and a criminal offence, thereby reducing this scourge in South African society. Corruption is linked to fraud, which is the focus of this research.

The NDP (2012:394) suggests that a framework should be created for the prevention of crime. In developing this framework organisations should consider three key factors. These are to identify the following:

- the root causes;
- the opportunity to commit the crime, and
- the lapses in ethical standards.

These three factors are similar to the factors of the fraud triangle of pressure (cause), rationalisation (justifying the lapse in ethics) and opportunity. According to the NDP (2012:394), there are five factors that will ensure success of the crime prevention process. These are accountability, leadership, coordination, monitoring and reporting. The criminal justice system, according to the NDP (2012:394), is focused on deterring crime by punishing offenders, in the form of incarceration, in order to prevent future crimes as well as to remove the criminal from society.

According to the NDP (2012:445), individuals who are entrusted with public funds should be held accountable. Whistle-blowers should be afforded protection from any type of harm for reports that are made in good faith. The procurement of goods and services should be continually monitored. Poor governance, according to the NDP (2012:446), effectively undermines development in South Africa. The Prevention and Combating of Corrupt Activities Act 12 of 2004 is but one of the effective laws that can assist universities in the fight against fraud and corruption.

The NDP (2012:449) encourages the creation and implementation of “*integrity pacts*” between organisations and their suppliers, where both parties agree not to request or pay bribes or collude with competitors in order to be awarded a contract. The NDP (2012:450) advocates that whistle-blowers require more protection beyond protection from “*occupational detriment*”. It (2012:451) holds that it is not uncommon for individuals who were found guilty of corruption in one department to resurface in another department. Similarly, university employees who resign before facing disciplinary action may resurface at another university and continue their fraudulent conduct. The NDP (2012:452) suggests that guilty employees should be held personally liable for losses arising out of corrupt activities. Universities can rely on Section 37D (1) (b) (ii) of the Pension Funds Act 24 of 1956, to recover losses that it has suffered, from the pension fund of the guilty employee. The NDP should be considered where it pertains to higher education, particularly in addressing employee fraud and prevention strategies at universities in KwaZulu-Natal.

6.11 BATHO PELE PRINCIPLES

The South African government first introduced the Batho Pele (people first) principles by means of a White Paper on Public Service Delivery during 1997. According to Thornhill

(2012:111), the Batho Pele principles are an indication of the commitment of government to ensuring that public servants place the citizens of South Africa first in service delivery. The eight Batho Pele principles (2010:11) comprise of consultation, service standards, access, courtesy, information, openness and transparency, redress and value for money. Public servants should:

- Consult and provide choices to people about the quality and extent of service that they can receive;
- Tell people about the standard of service they can expect to receive;
- Provide equal access to services which people are eligible for;
- Treat people with courtesy;
- Provide all relevant information to people about the services they receive;
- Be open and transparent with people about how the government department operates, including how much it costs and the name of the person in charge;
- Promptly remedy situations where service is not delivered according to expectation or offer an apology or explanation, and
- Provide services that are economical and efficient.

Section 8 of the Batho Pele principles (2010:77) relate to the right of citizens to access to higher education. The Batho Pele principles refer specifically to the Higher Education Act 101 of 1997 insofar as fairness and transparency in the allocation of funding, especially for previously disadvantaged students, is concerned. Thornhill (2012:111) postulates that public servants should treat people fairly and reasonably by executing their official tasks with integrity. According to Thornhill (2012:116), professional codes of ethics for public servants are rapidly becoming a norm.

6.12 KING CODES ON CORPORATE GOVERNANCE

Shortly after the Cadbury Report was released, South Africa commenced a process to address corporate governance in the country. Wixley and Everingham (2002:3) postulate that the corporate governance model used in South Africa is derived from the Anglo Saxon model of the United Kingdom, as opposed to the system used in certain other parts of Europe, namely the two-tier system, such as the two-tier system used in Germany, which has two boards of directors. First, there is the supervisory board which does not have any executive authority

except to appoint or remove a manager on the board. Second, there is the management board, which is responsible for the day-to-day management of the entity.

According to the website of the Institute of Directors South Africa (IODSA 2014), Professor Mervyn King, was a former judge in the High Court in South Africa, who was approached in 1992 to set up a committee to compile guidelines for corporate governance in South Africa. During 1994, the initial King Report on Corporate Governance, popularly known as “*King I*”, was released. According to King (2006:8), the scope of the King Committee was wider than that of the Cadbury Committee because it too was tasked with addressing issues in addition to those of financial governance in a new democratic South Africa. In the King I (1994) Report, guidelines were provided to organisations on codes of practice and codes of conduct. During 2002, a second report (King II) on Corporate Governance was released followed by King III, which was released during 2009. King III focuses on providing a framework to organisations for effective leadership, sustainability and corporate citizenship.

Ncayiyana and Hayward (1999:8) posit that the council of a university should operate within best practice norms as espoused in the King Report on corporate governance. These authors also suggest that members of council should be mindful of certain values and traditions that exist within higher education institutions. These values and traditions are academic freedom, independence of the institution and consultation with all stakeholders with respect to relevant decisions that are made by council. According to Ncayiyana and Hayward (1999:5), higher education institutions should be allowed to function autonomously, with freedom, sufficient resources and responsibility.

6.12.1 King I

The first King Report on Corporate Governance was issued in 1994 (King I) by the IODSA (1994), making it the first code for corporate governance in South Africa. According to Jackson and Stent (2010:4/3), the Johannesburg Securities Exchange (JSE) made it mandatory for all listed companies to indicate in their annual financial statements a declaration by the directors that they have complied with the Code of Corporate Practices and Conduct enshrined in King I.

King I applied to companies listed on the JSE, large state-owned enterprises, financial companies, insurance companies, as well as large unlisted companies with shareholder equity of over R50 million. Although not mandatory, King I provided guidance on corporate governance which was suitable for all companies in South Africa.

The essential aspects of King I covered the makeup of the board of directors, terms of office for executive directors, directors' remuneration, frequency of board meetings, annual reporting, auditing, affirmative action and code of ethics.

6.12.2 King II

The IODSA (2002) issued King II in 2002 with the purpose of reviewing the relevance of King I in relation to developments around the world. According to Jackson and Stent (2010:4/3), King II was envisaged to also provide recommendations to companies about reporting in respect of ethical accounting and auditing practices as well as safety, health and environmental issues. King II was not a prescriptive code for corporate governance to adhere to, but was a requirement for companies listed on the JSE.

King II was expanded to include State departments at national, provincial and local government levels. The essential aspects of King II covered directors' responsibilities, risk management, internal audit, reporting on sustainability, accounting and auditing as well as legal compliance and enforcement.

According to Kakabadse and Korac-Kakabadse (2002:310), King II provides more detail on the various aspects of King I. Some of the aspects relate to the roles of the chairperson and chief executive officer, disclosing remuneration of directors, term of office of non-executive directors, role of the audit committee and remuneration committee, use of information technology, role of internal audit and risk management as well as non-financial aspects such as safety, health, environment and ethics.

According to Jackson and Stent (2010:4/4), the Companies Act 71 of 2008, which came into existence in 2008, places emphasis on corporate governance as part of the reform of the corporate environment in South Africa. Once again, the Johannesburg Securities Exchange (JSE) made it mandatory for all listed companies to indicate in their annual financial

statements a declaration by the directors that they have complied with the Code of Corporate Practices and Conduct enshrined in King II.

6.12.3 King III

According to Jackson and Stent (2010:4/4), the King code of governance for South Africa (King III) was created during 2009. The IODSA (2009) issued King III pursuant to the promulgation of the Companies Act 71 of 2008, as well as due to global changes in corporate governance. King III embodies many sound governance principles that were contained in the previous two King reports on corporate governance. The difference with King III is that it applies to all public, private and non-profit entities that operate in South Africa.

The “*apply or explain*” basis, for the implementation of the code on corporate governance, emanated out of King III. The term “*apply or explain*” means that, when directors choose not to implement a governance recommendation, they need to explain the reasons why it is not applicable. In this regard, Jackson and Stent (2010:4/5) hold that the “*apply or explain*” basis does not afford directors an excuse to violate any laws. Legislative compliance does not operate on the “*apply or explain*” basis. Directors cannot attempt to justify a violation of the law on the basis that it was done in the best interests of the entity. King III is not enforced through any legislation. The Companies Act 71 of 2008 contains many corporate governance principles that were contained in King II.

According to Wixley and Everingham (2002:9), compliance with King III is voluntary to all private sector entities and certain public sector entities in South Africa, except for companies that are listed on the Johannesburg Securities Exchange (JSE). There are nine constructs (principles) to the King III IODSA (2009:16) corporate governance framework. They are:

- Ethical leadership and corporate citizenship;
- Boards and directors;
- Audit committees;
- Governance of risk;
- Governance of information technology;
- Compliance with laws, codes, rules and standards;
- Internal audit;
- Governing stakeholder relationships, and

- Integrated reporting and disclosure.

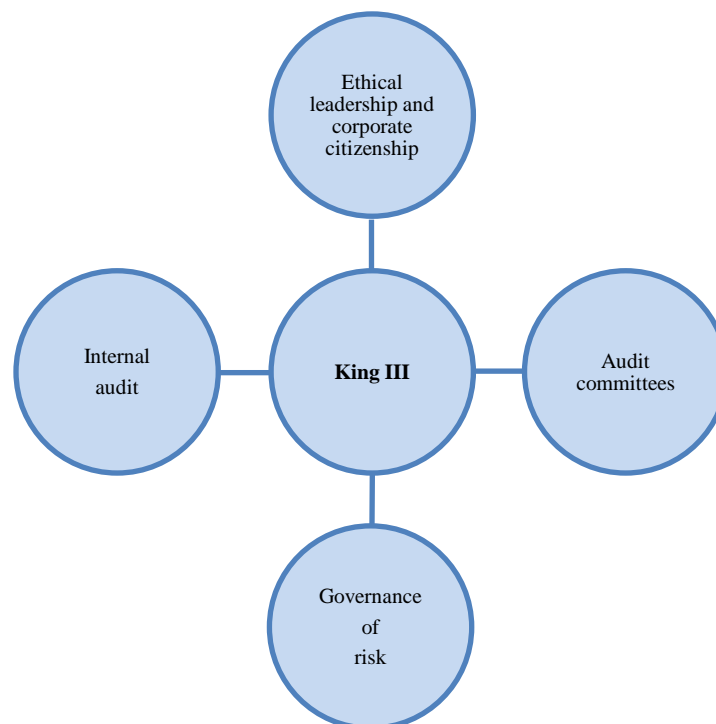
For purposes of this research, the following four relevant constructs of this framework were chosen:

- Ethical leadership and corporate citizenship;
- Audit committees;
- Governance of risk, and
- Internal audit.

Each of these four constructs contains various governance elements. The governance elements in turn contain various governance principles. These chosen governance elements and principles of the King III corporate governance framework have simplified our understanding about fraud prevention from a holistic perspective.

The selected corporate governance constructs, elements and principles are explained further in this chapter. Figure 6.1 below depicts the four constructs of King III that were chosen for this study:

Figure 6.1: Adapted from the King Code of Governance for South Africa (King III)



Source: IODSA (2009:16)

Table 6.2 below reflects the governance elements and principles associated with the four chosen constructs of King III:

Table 6.2: Chosen Constructs of the King Code of Governance for South Africa (King III)

CONSTRUCT	GOVERNANCE ELEMENT	GOVERNANCE PRINCIPLE
Ethical leadership and corporate citizenship	Responsible leadership, the board's responsibilities and ethical foundation.	The board should provide effective leadership based on ethical foundation.
		The board should ensure that the company is, and is seen to be, a responsible corporate citizen.
		The board should ensure that the company's ethics are managed effectively.
Audit committees	Existence of audit committees.	The board should ensure that the company has an effective and independent audit committee.
	Membership and resources of the audit committee.	Audit committee members should be suitably skilled and experienced, independent, non-executive directors. The audit committee should be chaired by an independent, non-executive director.
	Responsibilities of the audit committee.	The audit committee should oversee integrated reporting. The audit committee should ensure that a combined assurance model is applied to provide a co-ordinated approach to all assurance activities.
	Internal assurance providers.	The audit committee should satisfy itself of the expertise, resources and experience of the finance function. The audit committee should be responsible for overseeing of internal audit. The audit committee should be an integral component of the risk management process.
	External assurance providers.	The audit committee is responsible for recommending the appointment of the external auditor and overseeing the external audit process.
	Reporting.	The audit committee should report to the board and shareholders on how it has discharged its duties.
	Governance of risk	The board's responsibility for risk governance.
The board should determine the levels of risk tolerance.		
The risk committee or audit committee should assist the board in carrying out its risk responsibilities.		
Management's responsibility for risk management.		The board should delegate to management the responsibility to design, implement and monitor the risk management plan.
Risk assessment.		The board should ensure that risk assessments are performed on a continual basis.
		The board should ensure that the frameworks and methodologies are implemented to increase the probability of anticipating unpredictable risks.
Risk response.		The board should ensure that management considers and implements appropriate risk responses.
Risk monitoring.		The board should ensure continual risk monitoring by management.
Risk assurance.	The board should receive assurance regarding the effectiveness of the risk management process.	
Risk disclosure.	The board should ensure that there are processes in place enabling complete, timely, relevant, accurate and accessible risk disclosure to stakeholders.	
Internal audit	The need for and role of internal audit.	The board should ensure that there is an effective risk-based internal audit.
	Internal audit's approach and plan.	Internal audit should follow a risk-based approach to its plan.
		Internal audit should provide a written assessment of the effectiveness of the company's system of internal control and risk management. The audit committee should be responsible for overseeing internal audit.
Internal audit's status in the company.	Internal audit should be strategically positioned to achieve its objectives.	

Source: IODSA (2009:16)

6.12.3.1 Ethical Leadership and Corporate Citizenship

In ensuring ethical leadership and corporate citizenship, the board of a company should:

- Provide direction for the company strategy and operations;
- Be mindful of the impact of the company operations on people, profit and planet;
- Engender an ethical culture within the company by getting management to devise and implement a code for ethical conduct;

- Be accountable to all stakeholders, and
- Execute its responsibilities with responsibility, accountability, fairness and transparency.

6.12.3.2 Audit Committees

In terms of good governance and compliance with the Companies Act 71 of 2008, audit committees should be established for all companies. The audit committee should:

- Report directly to the board of the company;
- Meet independently with internal and external auditors;
- Have suitably skilled and experienced members who are independent, non-executive directors;
- Monitor the accuracy and completeness of the financial reporting of the company;
- Maintain oversight in respect of integrated reporting;
- Ensure that it receives combined assurance from internal and external auditors as well as from management;
- Be satisfied with the competence of the finance function of the company;
- Maintain oversight of the internal audit function;
- Play an integral role in the process to manage risks, including fraud risks, insofar as it relates to financial reporting;
- Oversee the external audit process and recommend the appointment of external auditors, and
- Report to the board and shareholders about its activities.

6.12.3.3 Governance of Risk

The governance of risk has to be considered within the risk management process, and in this regard the board should:

- Take responsibility for the governance of risk and ensure the existence of a risk management policy and plan that is widely publicised and implemented;
- Ensure that management identifies and measures risks and implements mitigating controls to obviate the risks;
- Determine the levels of risk that the company is willing to tolerate for key risks;
- Be assisted by the audit and risk committee in carrying out its risk responsibilities;

- Ensure that management designs, implements and monitors the risk management plan;
- Monitor and ensure that assessments are performed of the various types of risks on an annual basis;
- Be assured by management that risk management frameworks and methodologies have been implemented which enhance the predicting of all types of risks;
- Ensure that all risks are ranked and rated and that management has devised adequate responses to the identified risks;
- Ensure that management monitors the identified risks on an ongoing basis;
- Be assured by management about the effectiveness of the risk management process, which should be assessed by internal audit;
- Ensure that the internal audit function does not take on responsibility for any risk management functions, and
- Issue a statement in the integrated report on how it executed its roles and responsibilities in respect of risk management.

6.12.3.4 Internal Audit

The internal audit projects should be risk-based, and in order to ensure that the internal audit function is effective, the board should:

- Ensure that all internal audit projects are based on identified risks within the company;
- Ensure the internal audit function provides a written assessment of the effectiveness of the internal control environment and the risk management process;
- Maintain oversight of the internal audit function, and
- Ensure that the Chief Audit Executive reports administratively to the Chief Executive Officer of the company and functionally to the audit committee.

This section is particularly relevant to employee fraud and prevention strategies at universities in KwaZulu-Natal.

6.12.4 King IV

According to the website of the IODSA (2015), King III is in the process of being succeeded by King IV. The reasons proffered by the IODSA for embarking on King IV, is that there have been changes in the corporate governance environment coupled with legislative and regulatory changes globally. Another reason tendered is that non-profit organisations, public sector entities and non-listed companies have experienced difficulty in customising King III to their needs. Enhancements to King III will make it easy for such entities to adapt the code to their unique circumstances. King IV will be simplified so that it can be interpreted easily. King IV aims to be unique in that the governance principles will be distinguished from practice recommendations. King IV is anticipated to be released during 2016.

6.13 SUMMARY

This chapter dealt with the theory and history of corporate governance both in South Africa and globally. It also showed conclusively that corporate governance forms an integral part of the fraud risk management process, which is essential in addressing employee fraud and prevention strategies at universities in KwaZulu-Natal. The Higher Education Act 101 of 1997 and Companies Act 71 of 2008 are a number of the various pieces of legislation that were created to address governance within tertiary institutions and companies in South Africa. These various pieces of legislation and King III set out the governance structures as well as the roles and responsibilities expected from these structures and incumbent members, such as board members and the audit committees. The chosen governance elements and principles of King III are relevant to employee fraud and prevention strategies at universities in KwaZulu-Natal. This chapter also highlighted the relevance of aspects of the Batho Pele principles, National Development Plan 2030 and African Charter with respect to addressing fraud and corruption, especially within the context of employee fraud and prevention strategies at universities in KwaZulu-Natal. The following chapter elaborates on the research methodology employed for the study of employee fraud and prevention strategies at universities in KwaZulu-Natal.

CHAPTER SEVEN

RESEARCH METHODOLOGY

7.1 INTRODUCTION

In ensuring the success of a research project, the methodology that is followed has to be expansive to stand up to academic scrutiny. The research methodology employed in this study was designed to derive a valuable contribution to the existing body of knowledge. Fraud, which is the subject of this research, is a topic that requires circumspection when it is dealt with in society in general and at universities in particular. This situation is exacerbated when it forms part of a research project such as this, and consequently, the research methodology that was used for this study is elaborated on in detail in this chapter.

This chapter consists of a number of relevant sections, listed below:

- the relationship between objectivity and the type of research being conducted;
- the general research design;
- the particular research approach;
- the research strategy;
- data collection methods;
- data quality control;
- data analysis;
- sampling techniques;
- validity and reliability;
- ethical considerations;
- pilot survey;
- brief reference to presentation of data, interpretation and articulation of the results of the statistical analysis, and
- a summary to the chapter.

7.2 OBJECTIVITY AND TYPE OF RESEARCH

The Merriam-Webster Dictionary (2015) defines objective as being “*based on facts rather than feelings or opinions*”. The researcher is an experienced forensic investigator who has been involved in investigations into fraud within the public and private sectors. This experience in

seeking the truth advantageously positioned the researcher to collect data objectively. The research was carried out objectively in order to obtain results that could be relied upon and replicated within the research community. The research entailed searching the literature as well as conducting an empirical survey to objectively find facts about employee fraud and prevention strategies.

Literature was sourced from the latest relevant books, academic journals, legislation, published and unpublished research as well as other literature sources. The objective of the literature search was to ascertain what current and relevant studies had been conducted in relation to the topic of this study. Arising from the literature search, a selection of theoretical criteria was extracted from pertinent models and frameworks.

The empirical survey entailed the collection of data from participants by means of a survey questionnaire which was distributed electronically to them. The objective was to glean the knowledge and experience of participants about fraud committed by employees and the strategies implemented by universities to prevent fraud from occurring. Denscombe (2002:70) asserts that gaining access to documents and people is a prerequisite for research, otherwise a researcher will make subjective assumptions about the topic. The making of assumptions in a study brings into question the objectivity of the research.

In the quest to collect data about employee fraud and prevention strategies at universities in KwaZulu-Natal, data were also collected from other sources such as fraud case files and interviews that were held with knowledgeable individuals within the KwaZulu-Natal province. The use of various methods to collect data ensured that the collected data were accurate and based on objectivity.

7.3 RESEARCH DESIGN

The appropriate selection of a research design is critical to the success of research, which is a view that is supported by Leedy (1993:114). Mouton (2001:55) explains that the design of a research is a plan that will guide how the research should be conducted. According to Maxfield and Babbie (1995:4), an empirical design produces knowledge based on experience or observation. Welman and Kruger (1999:11) suggest that the empirical cycle includes the designing of a research strategy, collection of data and the analysis and interpretation of the

results thereof. According to Leedy and Ormrod (2001:91), a research design affords structure to the research procedures, data collection and their analysis. Mouton (2001:153) explains that structured electronic questionnaires are a source of data in empirical studies.

According to the Merriam-Webster Dictionary (2014), empirical means “*based on testing or experience*”. Mouton (2001:148) is of the view that an empirical design will involve field studies whereby primary data about the personal experience and knowledge of the respondents are collated. The empirical design was appropriate for this study because it involved a survey questionnaire which was distributed electronically to participants in order to collect data about their knowledge and experience involving fraud committed by employees at universities in KwaZulu-Natal. This strategy ensured that data were collected objectively and systematically from a randomly selected representative sample, and were then processed and analysed to offer findings that were representative of the total possible research population.

Leedy and Ormrod (2001:158) hold that multiple types of methods may be employed by researchers in collecting data in any single study. Data were gathered using the following techniques: review of literature, interviews with knowledgeable individuals, the analysis of fraud case files and the empirical phase using a survey questionnaire. According to Mouton (2001:149), an empirical research design involves going out to establish the personal knowledge and experience of the respondents on the ground. The empirical design facilitated an understanding as to how and why fraud was committed by university employees, the nature of fraud, its extent and impact, the efficacy of internal controls and the factors which led to the commission of fraud. The advantage of this design was that it allowed for the in-depth probing of the participants’ responses.

7.4 RESEARCH APPROACH

This research adopted a quantitative as well as a qualitative approach for the purpose of gathering data. The use of both quantitative and qualitative approaches is known as triangulation (Leedy 1993:143). The survey questionnaires, in-depth interviews, literature review as well as the review of case files ensured that concise data were collected. According to Leedy (1993:143), the advantage of the triangulation approach is that both the qualitative and quantitative methods are implemented to warrant accurate conclusions from the research. Such an approach positively impacted the validity and reliability of this research.

7.4.1 Quantitative Approach

Quantitative data were gathered by means of a survey questionnaire that was distributed electronically to all participants. According to Brynard and Hanekom (2006:37), the main source of quantitative data are questionnaires. Both quantitative and qualitative data were gathered by means of the survey questionnaire in order to answer all the research questions. A quantitative approach entailed gathering data from participants on their biographical information as well as other data which was numeric in nature to ensure that it could be analysed and quantified. According to Leedy (1993:144), the evaluation of the quantitative data requires total objectivity. For Welman and Kruger (1999:8), a quantitative approach provides a positivist view which entails the study of observable human behaviour.

7.4.2 Qualitative Approach

Qualitative data were collected by means of the survey questionnaire also. The qualitative data were collected from participants by means of the open-ended questions contained in the survey questionnaire. The purpose of the open-ended questions was to provide participants the opportunity to explain their responses in the quest to obtain qualitative data. Qualitative data included the response of participants about their personal experience and knowledge about fraud which had occurred at universities in KwaZulu-Natal. Meaningful responses from this section that added value to the study were described in the relevant contexts in answering the research questions. Those that did not add value were discarded.

7.4.3 Research Approach followed in this Study

The survey was carried out using a structured self-administered survey questionnaire (Babbie 1998: 257-263), which was distributed electronically to all participants. The questionnaire included a section that required the biographical details of the participants such as their age and gender. The structured dependent variable questions were both closed-ended and open-ended. Closed-ended questions were based on a five-point Likert scale. The purpose of open-ended questions was to afford the participants the opportunity to expand on their answers for the purposes of clarification or to express an opinion on the issue. The options of “yes” or “no” and multiple choice answers were also provided in the questionnaire. The draft questionnaire was discussed and agreed on with the supervisor and statistician. A pilot empirical survey questionnaire was initially produced and used in a preliminary survey as a precursor to hone

the actual questionnaire for optimum scientific acceptability when the empirical phase was embarked upon. After completion of the pilot study, the questionnaire was amended accordingly. The final version of the questionnaire was sent out by electronic mail to the executive managers and senior managers of the four universities located in KwaZulu-Natal province.

7.5 RESEARCH STRATEGY

The research strategy entailed a comprehensive search of the latest and relevant literature relating to employee fraud and prevention strategies at universities in KwaZulu-Natal. The literature search formed the prelude to this study as it provided a foundation of knowledge on available theoretical concepts as well as models and frameworks. The research strategy also entailed the gathering of quantitative and qualitative data by means of survey questionnaires and face-to-face interviews with knowledgeable individuals as well as the gathering of data from fraud case files. As part of the qualitative approach, knowledgeable individuals were interviewed on a face-to-face basis using a survey questionnaire which contained closed-ended and open-ended questions. Data collected from the three methods (survey questionnaire, face-to-face interviews and the fraud cases files) were captured onto three spreadsheets and provided to the statistician for analysis. The analysed data received from the statistician were interpreted and incorporated into this study.

7.5.1 Questionnaires

The survey was carried out using a structured self-administered survey questionnaire (Babbie 1998:257-263), which was distributed electronically to all participants using the electronic software called QuestionPro. The questionnaire included a section that required the biographical details of the participants. The structured questions were both closed-ended and open-ended. The purpose of questions that were open-ended was to afford the participants the opportunity to expand on their answers for clarification or to express an opinion on the issue. The options of “yes” or “no” and multiple choice answers were also provided in the questionnaire. There were a total of 59 closed-ended questions and a total of 6 open-ended questions. According to Welman and Kruger (1999:155), the summated or Likert scale is popularly used in the social sciences. The Likert scale usually embodies a five-point scale, where the options are *Strongly agree*, *Agree*, *Neither agree nor disagree*, *Disagree* or *Strongly disagree*. The participants were requested to indicate their answers based on Likert scale.

7.5.2 Interviews

As part of the literature review phase, face-to-face interviews were conducted with knowledgeable individuals who are skilled and experienced in conducting forensic investigations into employee fraud within universities, particularly universities in KwaZulu-Natal. The implication of interviewing these knowledgeable individuals was that data was collected from them based on their experiences in investigating fraud at universities. Using the non-probability purposive sampling method, two categories of knowledgeable individuals were identified, who had investigated frauds that had occurred at universities. These knowledgeable individuals were either permanently employed by universities or those in the private sector to whom forensic investigations are outsourced by universities. Three out of the four universities in KwaZulu-Natal outsourced their investigations into employee fraud to forensic auditing companies as they did not have the capacity within the university to investigate such cases. The fourth university employed 5 skilled and experienced permanent employees to conduct these investigations. Additionally, there were 4 experienced and skilled directors identified who are employed within four separate forensic auditing companies and who are known to possess experience and skill in conducting forensic investigations into employee fraud at universities in KwaZulu-Natal.

The interviews with these 9 knowledgeable individuals were conducted on a face-to-face basis at their convenience. The questionnaire that was used for the electronic self-administered survey was appropriately adapted and used for the face-to-face interview process as well. The questionnaire was adapted by adding a further 5 open-ended questions. A total of 59 closed-ended questions and 11 open-ended questions were put to the knowledgeable individuals. All the knowledgeable individuals were asked the same questions. The questionnaire included a section that required the biographical details of the participants. The structured questions were both closed-ended and open-ended. The purpose of open-ended questions was to afford the participants the opportunity to expand on their answers for clarification or to express an opinion on the issue. The options of “yes” or “no” and multiple choice answers were also provided in the questionnaire.

7.5.3 Fraud Case Files

Another method to collect data from the literature included the review of fraud case files. During communication with the four universities in KwaZulu-Natal it was found that fraud

case files were only available at one university because the other three universities outsourced investigations into employee fraud to forensic auditing companies. Data from case files involving employee fraud at these three universities were not available to be reviewed due to the confidential nature of the investigations. The face-to-face interviews with directors of four forensic auditing companies in KwaZulu-Natal, such as KPMG, PwC, Deloitte and Sizwe Ntsaluba Gobodo contributed towards addressing this deficiency because data about investigations into employee fraud at the three universities that outsourced such investigations could be collected from these directors.

There were 12 cases of employee fraud investigated at one of the four universities in KwaZulu-Natal. Pertinent data were collected from these fraud case files which were then captured onto a Microsoft Excel spreadsheet. The data were coded and analysed. Themes were identified from the analysed data based on information collated from the review of literature and the survey. The frequency distribution of individual themes was ascertained. The analysed data were included in the literature chapters of this study.

Data were collected from case files pertaining to fraud cases that were investigated by forensic investigators employed by universities located in KwaZulu-Natal during 2013. The 12 cases related to fraud committed by employees of the university. Six of these cases related to fraud that was committed against the university where the employee colluded with the supplier to commit the fraud. The other 6 fraud cases related to employees who acted on their own in order to enrich themselves. The types of documents that were analysed were forensic reports that were issued for each fraud case that was investigated by these forensic investigators. The reason for specifically choosing forensic reports was because all the data pertaining to the fraud cases are embodied in the forensic report. The purpose of reviewing and analysing the fraud case files was to establish the following:

- What was the cause of the fraud?
- What was the nature of the fraud committed by employees?
- What was the modus operandi of the perpetrator?
- What was the motive of the perpetrator?
- What measures were in place to prevent fraud?
- Why did the existing measures become deficient?
- What other factors led to the commission of fraud?

- What new measures have been implemented to prevent fraud from recurring?

The objective was to collect data from the forensic reports that would assist in answering the research questions. Data were collected about fraud cases from one university where fraud case files were available. It was possible to gain access to these case files because such cases were investigated internally by university employees tasked with investigating fraud cases. It was not possible to gain access to fraud case files at three other universities because fraud cases were investigated by external forensic auditing companies that were appointed by these universities for such a purpose. Fraud case files, pertaining to cases that were investigated by forensic investigators employed by universities in KwaZulu-Natal during 2013, were reviewed. Fraud cases that were investigated during 2013 were chosen because there were certain cases that were investigated during 2014 which were still in progress when this study was undertaken and were therefore *sub judice*. The specific type of document that was reviewed was the forensic report that was issued for each fraud case investigated by these forensic investigators. The reason for specifically choosing forensic reports was because all the data pertaining to the fraud case are usually embodied in the forensic report. The objective was to collect data from the forensic reports to assist in answering the research questions.

7.6 PILOT SURVEY USING THE QUESTIONNAIRE

The survey questionnaire was compiled after an in-depth literature search. The survey questionnaire was forwarded to the statistician for review. After various amendments were effected, the statistician provided approval for the distribution of the survey. A pilot survey questionnaire was initially produced and used in a preliminary survey as a precursor to hone the actual questionnaire for optimum scientific acceptability when the empirical phase was embarked on. Welman and Kruger (1999:146) believe that a pilot study is carried out on a reduced quantity of participants emanating from the identified population in order to detect any flaws, ambiguity or embarrassing questions. A pilot survey was conducted whereby three participants were requested to manually complete the survey questionnaire and provide feedback whether any questions were unclear or ambiguous. The pilot survey did not result in any significant changes to the questionnaire. This indicated that the statistician had rigorously interrogated the questionnaire before granting approval for the survey to commence. Minor changes were effected to the questionnaire after the pilot survey.

7.7 DATA COLLECTION METHODS

The data collection instruments, as well as the methods used for quantitative and qualitative data analysis, were agreed upon in consultation with a statistician. There were different instruments and techniques used, which are elaborated on below. The data collection instruments, as well as the methods used for collecting quantitative and qualitative data, were different from each other. These different instruments and techniques are elaborated on next.

7.7.1 Quantitative Data Collection

The data collection instrument that was used for the collection of quantitative data was a survey questionnaire. The questionnaire contained three different types of questions such as:

- questions requiring a “yes” or “no” answer;
- answers based on the Likert scale. The Likert scale used was a five-point version, with the options of *Strongly agree*, *Agree*, *Neither agree nor disagree*, *Disagree* or *Strongly disagree*, and
- open-ended questions providing an opportunity for the participants to proffer their personal views on the relevant issue.

There were a total of 59 quantitative questions (independent variables) in the survey questionnaire. The electronic survey, which was hosted online by QuestionPro, was made accessible to 114 randomly selected participants. These participants were sent an electronic mail through QuestionPro requesting them to participate in the survey and were provided an electronic hyperlink to access the online survey questionnaire.

7.7.2 Qualitative Data Collection

The data collection instrument that was used for the collection of qualitative data was the self-administered survey questionnaire. The online survey questionnaire was sent to executive and senior managers at four universities that are located in KwaZulu-Natal province. Executive and senior management comprised two strata of employees at the four universities in KwaZulu-Natal. Executive management included Vice-Chancellors, Deputy Vice-Chancellors and Executive Directors. The senior management cadres included Directors and Deans. The survey questionnaire was hosted online by QuestionPro. An email was sent out to a total of 114 randomly selected participants requesting their participation in the online survey questionnaire.

The online survey was accessible to participants for a period of approximately six weeks. Weekly reminders were sent out to participants requesting their participation in the survey.

The survey questionnaire contained open-ended and closed-ended questions. The purpose of open-ended questions was to provide participants the opportunity to explain their responses in the quest to obtain qualitative data. According to Seaman (1987:169), among the guidelines for a qualitative research design were discovery, description, and analysis of collected information. Leedy (1993:139) observes that the interviewing of participants, in order to gather data, is regarded as qualitative research. Qualitative data includes the response of participants about their experience and knowledge about fraud which had occurred at universities in KwaZulu-Natal. As noted, the use of both quantitative and qualitative approaches is known as triangulation (Leedy; 1993:143). The survey questionnaires, in-depth interviews, literature review as well as fraud case files ensured that reliable data were collected. According to Leedy (1993:143), the advantage of pursuing the triangulation approach is that both the qualitative and quantitative methods are implemented to warrant accurate conclusions from the research. Such an approach could positively impact the validity and reliability of the research.

7.7.3 Administration of the Survey Questionnaire

The draft questionnaire was discussed and agreed on with the supervisor and statistician prior to distribution. After a pilot survey was conducted, with changes made, the final version of the questionnaire was made accessible to executive and senior managers at the four universities located in KwaZulu-Natal. The survey was electronically set up on the Internet using the online research software QuestionPro. An electronic mail (email) was distributed to the sample of executive and senior managers through QuestionPro containing a hyperlink to the online survey. The purpose of the email to the selected sample was to invite them to participate in the online survey.

The online survey was available to the randomly selected sample for a period of six weeks. Regular emails were sent to potential respondents during this period reminding them to participate in the study or to complete the survey that they may have started but had not completed. A challenge experienced during the online survey was that it was not possible to identify all the respondents who had participated in the survey. This was because QuestionPro did not receive the email addresses of all the respondents who completed the survey. The only

means of identifying which respondents had completed the survey was by means of their Internet Protocol (IP) address. This is a numeric IP address that identifies the location of the respondent. The IP address is not sufficient to identify who the respondents are that had completed the survey or who had not. This resulted in reminders being sent to all respondents, including the respondents that had completed the survey.

There were 69% of respondents who opened the surveys with the presumed intent to complete the questionnaire. A total of 31% of potential respondents did not respond to the survey. Based on the number of respondents who opened the online survey 82% completed the survey. There were 18% of respondents that opened the survey but did not complete any questions. One respondent replied to a reminder email, boldly stating “I don’t like the questions”, with no further explanation. After six weeks had elapsed, the data pertaining to the results of the survey was downloaded onto a Microsoft Excel spreadsheet and provided to the statistician for analysis.

7.8 DATA COLLECTION INSTRUMENTS

7.8.1 Quantitative Data Collection

The data collection instrument that was used for the collection of quantitative data was a survey questionnaire. The questionnaire contained three different types of questions such as:

- questions requiring a “yes” or “no” answer;
- answers based on the Likert scale. The Likert scale used was a five-point version, with the options of *Strongly agree*, *Agree*, *Neither agree nor disagree*, *Disagree* or *Strongly disagree*, and
- open-ended questions providing an opportunity for the participants to proffer their personal views on the relevant issue.

7.8.2 Qualitative Data Collection

The data collection instrument that was used for the collection of qualitative data was the self-administered survey questionnaire. The survey questionnaire contained open-ended and closed-ended questions.

7.9 DATA QUALITY CONTROL

Denscombe (2002:100) shows that validity involves accurate questions and answers. Leedy and Ormrod (2001:98) postulate that a measuring instrument which measures what it is supposed to measure, is valid. The survey questionnaire was formulated based on the research aims, key concepts, research questions as well as the insight gained from an in-depth literature search. According to Welman and Kruger (1999:138), this is to guarantee that the measuring instrument measures what it was meant to measure.

Leedy and Ormrod (2001:98) found that content validity measures the knowledge and skills which participants have acquired. The survey questionnaire ensured content validity because the participants from the sample population are all experienced members of executive and senior management at the four universities who possess a wealth of knowledge about fraud risks. According to Mason (1998:148), utilising many methods to collect data enhances the validity of the research, such as the data collection methods employed in this study.

Leedy and Ormrod (2001:99) and Babbie (1998:129) believe that research results are reliable only if the same measuring instrument produces consistent results from different sources. This view is supported by Welman and Kruger (1999:143), who assert that the results which can be adapted to diverse instances, users and experiments, are reliable. Denscombe (2002:100) holds that reliability is ensuring that the processes and systems used for collecting the data are consistent and that the findings are not distorted. Consistency in data collection was maintained during this study to ensure that the findings were not distorted.

Babbie (1998:130) cautions that bias may influence the reliability of an instrument. In order to prevent bias, the exact same survey questionnaire was made accessible to all participants so that the results may be replicated by another researcher. A pilot study was conducted in order to test the measuring instrument and establish if there were any flaws or ambiguous or embarrassing questions. The preliminary collected data were discussed with the statistician to establish whether the questionnaire met the requirements of validity and reliability.

7.10 DATA ANALYSIS

According to Mouton (2001:108), the purpose of analysing data is to understand how it relates to concepts, constructs and variables, and to identify any themes, patterns or trends in the data.

The collected data, which could be numerically presented, were analysed with the assistance of the statistician. In collaboration with the statistician, the data were interpreted by means of recognised statistical methods and analytical instruments as set out below. According to Leedy (1993:139), the numerical data should be coded and calculated and then presented in the form of tables and graphs. The manner in which the quantitative and qualitative data were analysed is elaborated on below.

7.10.1 Analysis of Data from Questionnaires

The data were analysed by the statistician by means of the following tests:

- Descriptive statistics including means and standard deviations, where applicable. Frequencies have been represented in tables or figures.
- Chi-square goodness-of-fit-test: a univariate test, used on a categorical variable to test whether any of the response options are selected significantly more/less often than the others. Under the null hypothesis, it is assumed that all responses are equally selected.
- One sample *t*-test: used to test, in this study, whether the average value is significantly different from a value of 3 (the central score). This is applied to Likert scale questions.

7.10.2 Analysis of Data from In-Depth Interviews

The analysis of data collected from the in-depth interviews with knowledgeable individuals, was subjected to thematic analysis. Thematic analysis pinpointed, examined and recorded themes within the collected data which were useful to describe a phenomenon linked to a research question in order to find common themes or patterns. These themes were then analysed. There are six steps in the coding process of thematic analysis, which require one to:

- Be familiar with the collected data;
- Generate initial codes;
- Search for themes among the codes;
- Review the themes;
- Define and name the themes, and
- Produce the final report.

7.10.3 Analysis of Data from Fraud Case Files

The data collected from fraud case files were then subjected to content analysis. Content analysis was used to review content which was documented in writing. Holsti (1968:608) defines content analysis as “any technique for making inferences by systematically and objectively identifying special characteristics of messages”. There are four steps in the content analysis process:

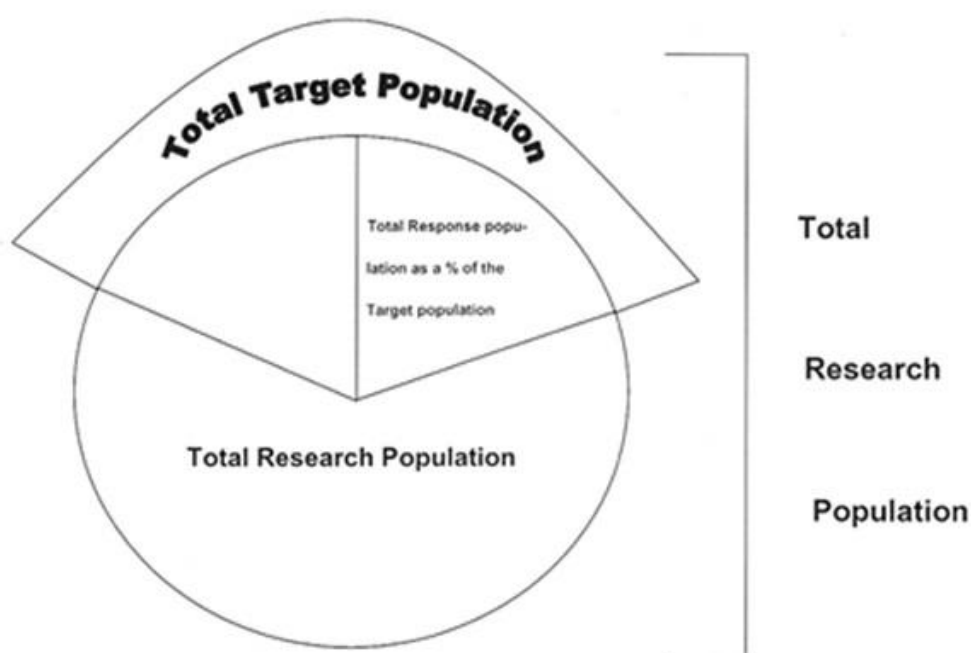
- Clearly define the phenomenon;
- Define the universe of the media and choose the sampling method;
- Describe the manner in which units of analysis are to be coded, and
- Train the coders.

7.11 SAMPLING TECHNIQUE

A randomly selected representative sample was chosen from the 4 universities that are located in the province of KwaZulu-Natal. The sample comprised of all members of executive and senior management at the 4 universities. Although information regarding fraud may be regarded as sensitive, no specific details such as names of fraudsters were requested from the participants. The questions were not designed to establish the specific details about the fraud cases; rather the questions were aimed at establishing the causes of employee fraud and prevention strategies at universities in KwaZulu-Natal. Most questions in the questionnaire aimed to establish what strategies were in place to prevent fraud at universities. Some repetition of detail may ensue when explaining the methodology used.

Figure 7.1 below depicts the different research populations such as the total research population, the sample population and the eventual response population:

Figure 7.1: Research population



Source: Ferreira (2007)

7.11.1 Total Research Population

The total possible research population was staff employed at the four chosen universities in KwaZulu-Natal, which is listed in Table 7.1 below:

Table 7.1: Total population of staff employed at 4 universities located in KwaZulu-Natal province

UNIVERSITY	NUMBER OF STAFF
UKZN	4098
UNIZULU	1288
DUT	1522
MUT	698
TOTAL	7606

Source: Department of Higher Education and Training (2015)

The total possible research population and sample population were determined in collaboration with the institutional statistician. The total target population comprised all members of executive and senior management strata from the 4 universities that are located in the province of KwaZulu-Natal. The executive management cadre is predominantly made up of Vice-Chancellors, Deputy Vice-Chancellors and Executive Directors. The senior management cadre is made up of Directors and Deans.

The websites of these 4 universities reflected that there were 33 members of executive management and 88 members of senior management. The target population was 121 individuals. Although these executive managers and senior managers are employees of the universities, they are also *de facto* employers on behalf of their universities. As executive and senior management, they are accountable to their university council for the overall management of the university in pursuit of fulfilling predetermined organisational objectives. In their roles of executive and senior management of the universities, they are entrusted with fulfilling their fiduciary duties. These include implementing adequate systems of internal control to mitigate any risks, including fraud.

According to COSO (2013:28), senior management are responsible for establishing policies and procedures which management and staff have to comply with in order to execute their responsibilities for internal control. Internal controls are implemented to prevent fraud from occurring. In essence, executive and senior management are regarded as employers. These participants provided relevant data pertaining to this study as they are the faces of the four universities. They are accountable for fraud that occurs in their areas of responsibility. In consultation with the relevant statistician, the survey questionnaire was distributed to executive managers and senior managers located at the 4 universities in KwaZulu-Natal. These participants were requested to respond to the questionnaire in their organisational capacities as *de facto* employers.

7.11.2 Sample Size

Welman and Kruger (1999:47) postulate that a population size is generally too large to include all members in the study, thus necessitating that a sample of the population be selected in consideration of practicality and economy. A random sample was selected for this study and was representative of the total possible research population, which is a form of probability sampling, of executive managers and senior managers at the 4 universities in KwaZulu-Natal. As noted, although these executive managers (Vice-Chancellors, Deputy Vice-Chancellors and Executive Directors) and senior managers (Directors and Deans) are employees of the universities, they are *de facto* employers on behalf of their universities.

The sample comprised all members of executive and senior management at the 4 universities. As executive and senior management they are accountable to their university council for the

overall management of the university in pursuit of fulfilling predetermined organisational objectives. In their roles of executive and senior management of the universities, they are entrusted with fulfilling their fiduciary duties. These include implementing adequate systems of internal control to mitigate any risks, including fraud. There were a total of 33 individuals from executive management and a total of 88 from senior management at the 4 universities in KwaZulu-Natal. The sample of potential participants totalled 121. During the process of collating the electronic mail (email) addresses of the identified respondents, it was found that there were 7 vacant posts among the selected sample.

The sample of 114 was not considered to be too large, necessitating that all 114 members of the selected sample be requested to participate in this survey by completing the online survey questionnaire. Table 7.2 below reflects the number of executive and senior management staff that were employed at the 4 universities, as listed on the respective websites:

Table 7.2: Target population of executive and senior management employed at 4 universities in KwaZulu-Natal

TARGET POPULATION	UKZN	UNIZULU	DUT	MUT	TOTAL
Executive Management	13	7	10	3	33
Senior Management	51	17	10	10	88
TOTAL	64	24	20	13	121

Source: Websites of UKZN, UNIZULU, DUT and MUT (2015)

Participants provided relevant data pertaining to this study as they are the faces of the universities. They are accountable for any fraud that occurs in their areas of responsibility. In consultation with the relevant statistician, the survey questionnaire was distributed to the identified target sample. These participants were requested to respond to the questionnaire in their organisational capacities as *de facto* employers.

The target population in this study was 114 and the response population was 65. This equates to a response population of 57% as a percentage of the target population. According to Seidman (1991:45), a response rate of 25 participants is sufficient, but aspects such as time and money would impact on determining when there are enough respondents in a study. Welman and Kruger (1999:64) concur and state that a sample of 15 should be a minimum that may be used, but suggest that a sample of 25 or more would be desirable for the purpose of analysis. Newman (2000:216) suggests that using a big sample size does not mean that the sample is representative of the population because of other factors that need to be considered. According to Newman (2000:217), equally increasing a sample size in smaller and larger samples

produces more accuracy in smaller samples. The number of surveys in this study totalled 65, which was more than twice the sample recommended by Welman and Kruger (1999) and Seidman (1991).

Seidman (1991:45) also suggests that the point of saturation reached with the information sought will also play a role in determining when to terminate the survey. This usually occurs after a number of interviews when similar themes or responses are being received and no new information is emerging. This is the point of information saturation. The responses received in the online survey in the current study indicate that the point of information saturation was reached as no new information had emerged as the survey progressed towards its closure.

Although the collection of data by means of face-to-face interviews from selected knowledgeable individuals forms part of the process of literature reviews, the methodology on how they were selected and interviewed is elaborated in this section. There were 4 directors of forensic auditing firms, namely, KPMG, Deloitte, PwC and Sizwe Ntsaluba Gobodo in KwaZulu-Natal, who were identified to participate in this study. There were also 5 forensic investigators permanently employed at one of the universities in KwaZulu-Natal, who were also identified to participate in the study.

A total of 9 knowledgeable individuals were purposefully identified by the researcher based on his awareness of their roles in investigating fraud at universities. These participants are members of reputable forensic investigation organisations who are also members of professional bodies that are bound by professional codes of conduct. This prevented bias. Welman and Kruger (1999:63) point out that purposive sampling is a form of non-probability sampling. These knowledgeable individuals, who work within the province of KwaZulu-Natal, contributed to this study based on their experience of investigating employee fraud at universities in KwaZulu-Natal. In-depth, face-to-face interviews were held with these identified directors and forensic investigators. These participants are regarded as experts in the forensic investigation field and known to be skilled and experienced with investigating employee fraud at universities in KwaZulu-Natal.

7.12 VALIDITY AND RELIABILITY TESTS

The selected sample is representative of all executive and senior managers at the four universities in KwaZulu-Natal because all 114 members of the executive and senior management strata were selected. This excludes the 7 vacancies that existed when the survey was conducted. Details about the sample were obtained directly from the websites of the 4 universities.

The multiple methods used to collect and analyse data from the literature searches, survey questionnaire, face-to-face interviews and fraud case files had a positive impact on the validity and reliability of the outcome of research. The in-depth literature review provided data that were sourced from both primary and secondary sources. Primary data were obtained from the survey questionnaires, face-to-face interviews with knowledgeable individuals and from fraud case files. This data were taken into consideration when compiling the survey questionnaire. After the survey questionnaire was compiled, it was reviewed by the supervisor of this research as well as the statistician. All suggested amendments were incorporated into the final survey questionnaire. The provision of the online survey questionnaire ensured that all participants were asked the same questions, which enhanced the validity and reliability of the collected data.

The process of compiling this thesis has been subjected to continuous review by the supervisor of this study. The recommendations and suggestions of the supervisor that were made during the review process were considered and necessary amendments were made to the thesis. The collected data were analysed by a registered statistician. The thesis was subsequently edited by a professional language editor to ensure it was of a standard acceptable for this level of study. A letter from the language editor is attached as Appendix 6 to this thesis.

7.13 ETHICAL CONSIDERATIONS

Ethical clearance was obtained from the Ethics Committee of the University of KwaZulu-Natal (UKZN) prior to the commencement of the collection of data. Permission was obtained from the four universities located in the province of KwaZulu-Natal for the research to proceed.

The online survey contained an introductory page where the participants were provided with a document that set out the purpose of the research. The document reflected that their participation was voluntary and that they would not be reimbursed for it. Participants were also

informed that it was their right to choose not to answer certain questions and to withdraw from participating at any time. They were assured of their anonymity and the confidentiality of the information they provided. Their consent was required before they were allowed to continue and participate in the online survey. In this regard, they were required to tick a box before they were allowed to continue with the survey. It is therefore evident that the participants who completed the survey would have provided their consent to participate in the online survey hosted by QuestionPro.

In order to enable the participants to consent sufficient information was provided to them in the introductory page of the online survey. The participants were assured, *inter alia*, that their privacy rights would be guaranteed and that their identities would not be revealed.

7.14 PRESENTATION AND INTERPRETATION OF FINDINGS

The data that was collected from the participants was analysed with the assistance of the statistician. The data collated from the empirical survey, incorporating the survey questionnaires and face-to-face interviews, were also analysed. After analysis of the empirical data, all the data were interpreted and presented in the form of tables, figures and charts which are explained in the next chapter. Analysis instruments and techniques were decided on in collaboration with the statistician after completion of the empirical survey. An explanation of the instruments used for statistical analysis is provided in the next chapter together with a presentation and explanation of the results and findings of this study.

7.15 SUMMARY

In this chapter, it is recorded that multiple methods were used in the study to collect, analyse and interpret data. The research design for this study ensured validity and reliability of the research findings. The participation by senior members of the 4 universities in KwaZulu-Natal in this study provides confidence about the findings that have emanated from the research on a topic as sensitive as employee fraud at universities. The validity and reliability of the data is further enhanced by the involvement of knowledgeable individuals who have contributed to this study. Primary data collected from fraud case files further contributed towards validity and reliability. The next chapter contains a presentation and explanation of the results and findings of this study.

CHAPTER EIGHT

INTERPRETATION, PRESENTATION AND ARTICULATION OF THE RESULTS OF THE STATISTICAL ANALYSIS

8.1 INTRODUCTION

In this chapter, the results and findings emanating from the responses provided by the respondents to the survey questionnaire are interpreted, presented and appropriately articulated. The results and findings are reported based on their relevance to the topic of this study, the problem statement, research questions, objectives and selected theoretical criteria. This chapter also explains the responses of the respondents relating to the following research focus areas as encapsulated in the questionnaire:

- Causes of employee fraud;
- Nature and extent of employee fraud;
- Measures that are currently in place to prevent fraud, and
- Additional fraud prevention measures that could be recommended.

The results of the online survey are elaborated on and presented in the form of figures and tables. The purpose of presenting the results by means of figures and tables is to simplify the understanding of the responses of the respondents. The results are reported and elaborated on in this chapter.

8.2 ANALYTICAL METHODS

Data that were collected from the review of relevant literature and the responses provided by respondents to questions posed in the survey questionnaire are explained in this chapter. The result of the online survey was downloaded from QuestionPro onto a Microsoft Excel spreadsheet. The data were checked by the researcher to ensure that the results on QuestionPro were accurately downloaded onto the spreadsheet. The responses provided by the respondents relating to the open-ended questions were grouped into themes and coded. Coding lists were compiled for each of the open-ended questions. The spreadsheet, which contained the coded closed-ended and open-ended questions, was submitted to the institutional statistician for analysis and reporting.

Analysing the data provides an understanding of how the data relates to concepts, constructs and variables. Data analysis also enables the identification of themes, patterns or trends in the data. The data from closed-ended questions were numerically presented and analysed by the statistician. The coded numerical data were calculated and presented in the form of tables and figures. All data and calculations were personally checked and verified by the researcher to ensure accuracy. The interpretation of the results from the survey was integrated with data that were collected from the in-depth literature review. Stated differently, the statistical results were combined with qualitative data collected from the literature review, interviews with knowledgeable individuals and fraud case files, by the triangulation method. This method enriched the quality of the findings of this study.

The manner in which the quantitative and qualitative data were analysed by the statistician is elaborated on below:

- Descriptive statistics including means and standard deviations, where applicable. Frequencies have been represented in tables or figures.
- Chi-square goodness-of-fit-test: a univariate test, used on a categorical variable to test whether any of the response options are selected significantly more/less often than the others. Under the null hypothesis, it is assumed that all responses are equally selected.
- One sample t-test: used to test, in this study, whether the average value is significantly different from a value of 3 (the central score). This is applied to questions that were answered by responding to a relevant Likert-scale number.

The data collected from the open-ended questions were subjected to thematic analysis. Thematic analysis pinpointed, examined and recorded themes within the collected data that were useful to describe a phenomenon linked to a research question in order to find significant themes or patterns. Before these themes were analysed, the researcher followed the following six steps to code the data for the thematic analysis process:

- Become familiar with the data;
- Create initial codes;
- Search for themes among the codes;
- Review the themes;
- Define and name the themes, and

- Produce the final report.

The statistician also performed bivariate analysis on certain questions chosen by the researcher to determine how they correlate with each other. Pearson’s correlation was used because the questions were ordinal in scale. Where the scale was strictly ordinal (never to always), the statistician checked the results with Spearman’s correlation.

8.3 INTERPRETATION, PRESENTATION AND ARTICULATION OF THE RESULTS

The purpose of the results about the qualification of the participants is to understand what levels of qualification of the members of senior and executive management are. The first section of the online survey contained questions relating to the biographical details of the respondents. The biographical information obtained from the survey reflects that the gender of the respondents is significantly male. This implies that there are fewer female employees who occupy senior and executive management positions at universities in KwaZulu-Natal. There is a significant number of senior and executive management personnel, whose level of qualification is a doctoral degree. It is not uncommon for academic employees in senior and executive management positions, such as Deans and Deputy Vice-Chancellors, to be in possession of doctoral degrees. The results indicate that the chosen strata of employees are adequately qualified to hold senior and executive management positions. Figure 8.1 below reflects the gender and qualifications of the respondents:

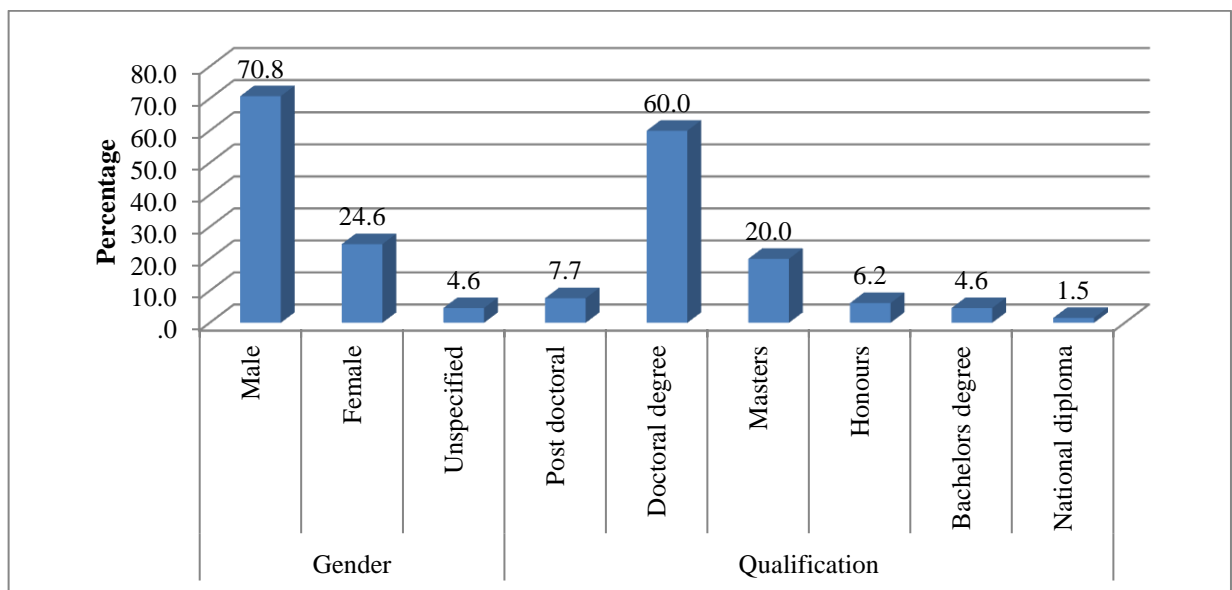


Figure 8.1: Gender and qualification of respondents

As senior and executive management it is expected that they possess adequate and appropriate experience in preventing fraud at universities. There are significantly more senior managers at universities in KwaZulu-Natal than executive managers. A significant number of these managers have been in their current positions for 3 years, while the largest percentage of managers have been in their current positions for more than 5 years. The job category and duration of managers in their current positions are depicted in Figure 8.2 below:

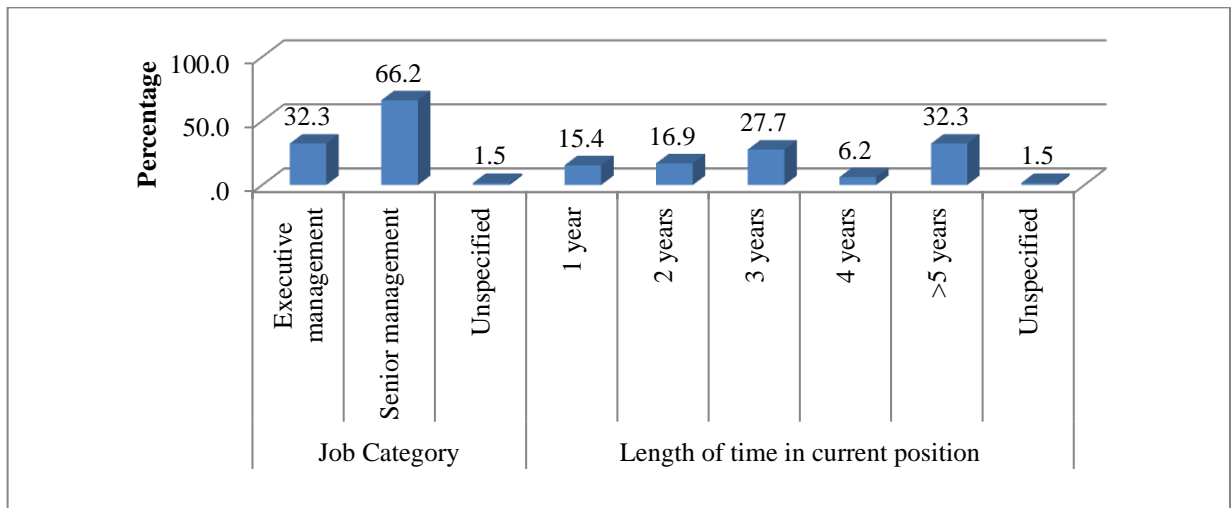


Figure 8.2: Job category and length of time in current position

The detailed results and findings emanating from the survey are elaborated on in detail in the sections below. The results and findings are reported below in four sections which are related to the following four research questions of this study:

- What are the causes of employee fraud?
- What is the current nature and extent of fraud committed by employees?
- What fraud-prevention measures are currently in place to manage fraud at universities in general and those in KwaZulu-Natal in particular?
- What additional fraud prevention measures could be recommended to universities for implementation on various levels?

8.3.1 Results and Findings on the Causes of Employee Fraud

There is agreement amongst respondents that universities have been victims of employee fraud and that dishonesty is a trait of fraudsters who exploit their superior's trust. There is significant agreement amongst the respondents about the causes of employee fraud at universities in KwaZulu-Natal. All respondents agree that:

- Greed is the motive of fraudsters;
- Inadequate internal controls lead to employees committing fraud;
- Poor ethical culture leads to employees committing fraud, and
- Other factors lead to employees committing fraud.

Knowledgeable individuals who were interviewed during this study indicated significant agreement about the causes of employee fraud as outlined above. This implies that university management and knowledgeable individuals are in agreement to a significant extent about what causes employee fraud. A review of 12 fraud case files at one of the universities reveals that there are multiple causes of employee fraud. The significant causes are dishonesty, personal gain, collusion, circumvention of internal controls, non-compliance with policies and procedures, and poor internal controls. These results that are depicted in Figure 8.4 later in this section, indicate that there is corroboration between the views of the respondents and knowledgeable individuals; data collected from fraud case files indicate that dishonesty, personal gain and deficient controls led to the fraud.

8.3.1.1 Universities as Victims of Fraud

The respondents agree, to a significant extent, that universities in KwaZulu-Natal are victims of employee fraud. The result of this question correlates with the findings of the survey by PwC (2011:18), where 56% of perpetrators of fraud were employees of the company that they defrauded. To understand what causes employee fraud, there should be confirmation of the existence of fraud. This finding confirms that universities in KwaZulu-Natal have been defrauded by their employees.

8.3.1.2 Dishonesty

Respondents significantly agree that dishonesty is a distinguishing characteristic of fraudsters. Dishonesty impacts on integrity and morality. Dishonesty also manifests itself when fraud is committed. The fraudster misrepresents material facts and deceives his/her employer in order to receive an undue benefit. This dishonest act results in the committing of a crime. According to Albrecht and Schmoldt (1988:16), dishonesty is prevalent in society. Universities are not immune to dishonest employees.

8.3.1.3 Exploitation of Trust

Fraudsters exploit their superior's trust in order to commit fraud against their employer. There is significant agreement by the respondents to this question. In this regard, Albrecht (1998:111) holds that trustworthy employees should not be regarded as a control measure. Cressey (1973:30) holds the view that trusted employees violate their employer's trust when they have a financial difficulty. Consequently, employers should be aware that trusted employees are capable of committing fraud against them. Universities in KwaZulu-Natal in particular, and universities in general, should implement control measures to mitigate this type of risk.

8.3.1.4 Motive

The responses of the respondents reflect significant agreement with the statement that greed is the motive of the fraudsters. Jones and Jing (2011:859) and Wells (2001:89) concur that the motive to commit fraud is greed. Albrecht *et al.* (2006:33) holds that the motive (pressure) to commit fraud is linked to finances or vices such as addiction to alcohol, drugs and/or gambling. Work-related motive may be a disgruntled employee who is not considered for a promotion and intends for the fraud to be a form of retaliation against the employer. Another motive is trying to placate a family member by buying him/her gifts. Albrecht *et al.* (2006:33) aver that the motive of employees who commit fraud could be greed, living an unaffordable lifestyle or unplanned financial need. A review of the data collected from the fraud case files revealed that greed is the motive in all the cases. The fraudsters were employed in positions within the organisation and were paid a salary for their services. They committed fraud to enrich themselves. Universities should consider the motives of fraudsters, especially greed, when designing and implementing fraud prevention strategies.

8.3.1.5 Inadequate Internal Controls

Internal controls are widely regarded by organisations as a fraud prevention measure. Respondents agree significantly that inadequate internal controls lead to employees committing fraud. According to the IIA (2009:19), an organisation cannot eradicate fraud because of the cost of implementing fraud prevention internal controls. Employers should consider reviewing current fraud prevention internal controls and ensure that these are adequate and functioning as intended.

8.3.1.6 Poor Ethical Culture

The response to this question shows that there is significant agreement by the respondents that a poor ethical culture exists at universities in KwaZulu-Natal. This poor ethical culture leads to employees committing fraud against their universities. According to COSO (2013:12), organisations should advocate integrity and sound ethical values. Management and the board of directors should set a sound ethical tone at the top (lead by example), design and implement a code of conduct, and monitor and measure compliance with this code during employee performance reviews.

8.3.1.7 Figures and Table Depicting the Causes of Employee Fraud

There is significant agreement from the respondents about the causes of employee fraud at universities in KwaZulu-Natal. Knowledge about the causes of employee fraud should be used by universities when amending or designing their fraud prevention strategies. Figure 8.3 below depicts the results which indicate that the scores are above the mean for all seven questions in this section:

Figure 8.3: Mean results about the causes of employee fraud

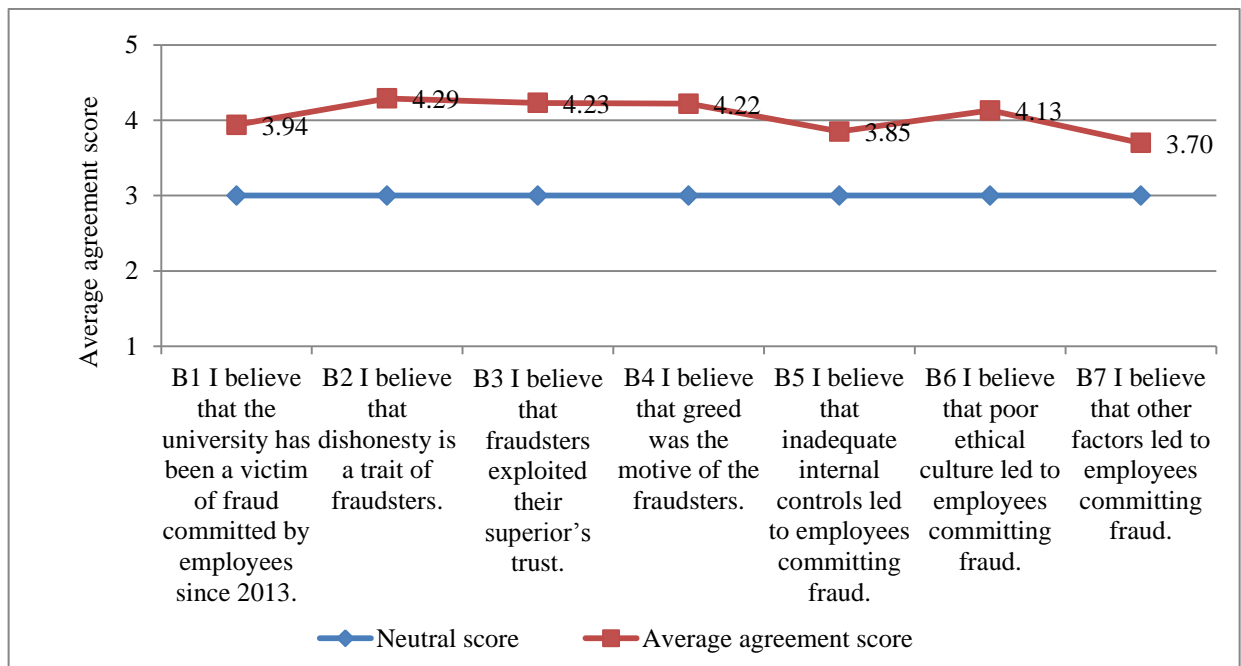


Table 8.1 below reflects the results of the One-sample *t*-test analysis on the causes of employee fraud at universities in KwaZulu-Natal:

Table 8.1: Results from One-sample t-test analysis on the causes of employee fraud

Question	Result of Analysis	One-sample t-test
B1	Significant agreement	(t (63) = 6.505, p<.0005, M = 3.94, SD = 1.153)
B2	Significant agreement	(t (62) = 11.496, p<.0005, M = 4.29, SD = .888)
B3	Significant agreement	(t (61) = 11.796, p<.0005, M = 4.23, SD = .818)
B4	Significant agreement	(t (62) = 12.932, p<.0005, M = 4.22, SD = .750)
B5	Significant agreement	(t (61) = 5.816, p<.0005, M = 3.85, SD = 1.157)
B6	Significant agreement	(t (62) = 9.676, p<.0005, M = 4.13, SD = .924)
B7	Significant agreement	(t (62) = 5.981, p<.0005, M = 3.70, SD = .927)

The results above reflect that there is significant agreement by the respondents to all seven questions in this section. The results emanating from the analysis of data collected from knowledgeable individuals similarly indicate significant agreement to all these seven questions.

An analysis was conducted of the data collated from fraud case files. Figure 8.4 below reflects the frequency distribution of themes relating to the causes of employee fraud which are identified from the fraud case files:

Figure 8.4: Causes of employee fraud extracted from fraud case files

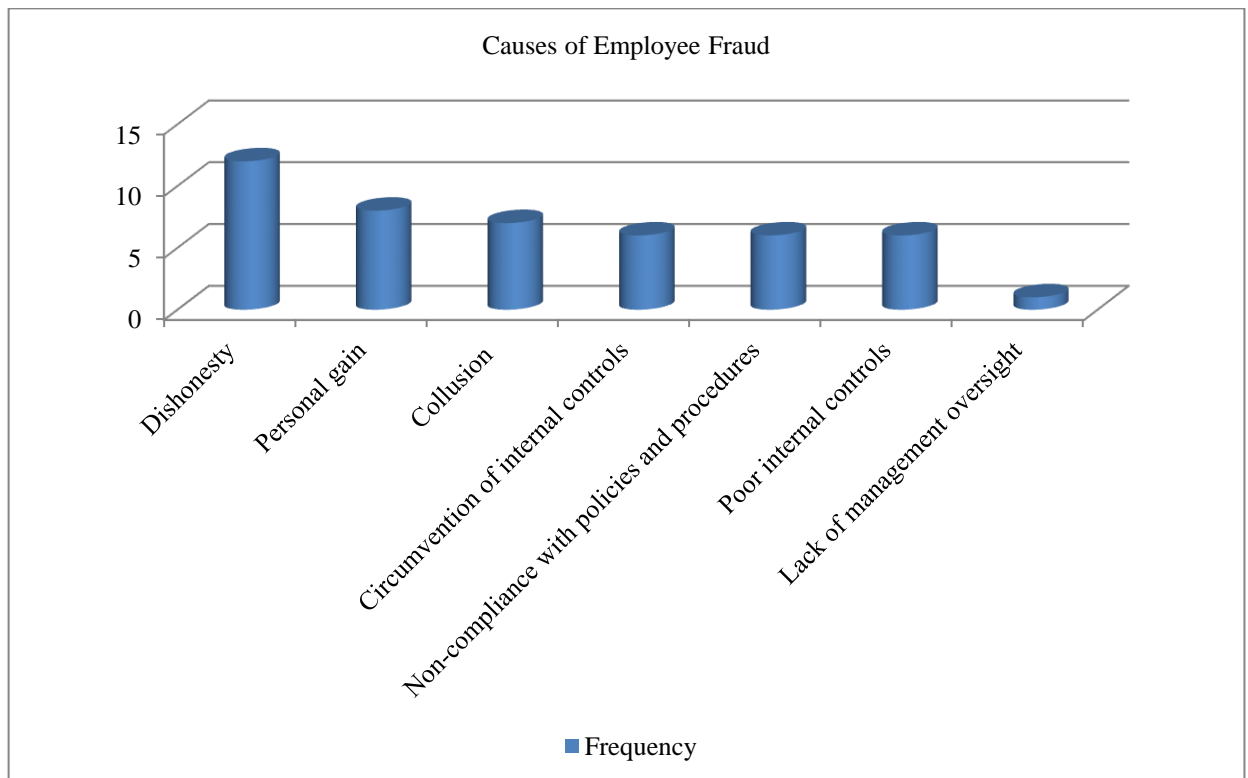


Figure 8.4 above indicates that dishonest employees who commit fraud for personal gain will circumvent internal controls and/or not comply with university policies and procedures to commit fraud. In order to prevent fraud under such circumstances, it would require continuous

management oversight over operations which will be essential to identify any deficient internal controls and take corrective action to enhance them.

Respondents and knowledgeable individuals concur that the poor ethical culture prevailing at universities contributed towards employees committing fraud. There is also significant agreement from the respondents and knowledgeable individuals that fraudsters exploit the trust of their superiors to commit fraud. This implies that there are dishonest employees who breach the trust placed on them by their superiors in order to commit fraud. It is essential that universities in KwaZulu-Natal inculcate a sound ethical culture which will dissuade employees from committing fraud.

8.3.1.8 Bivariate Analysis

The statistician conducted bivariate analysis on the following two questions:

- B6 I believe that poor ethical culture led to employees committing fraud.
- D10 Management is responsible for preventing fraud at the university.

There is a strong positive correlation between these two questions ($r = 0.370$, $p = .005$). Those who agree that management is responsible for preventing fraud at the university, also agree that poor ethical culture led to employees committing fraud. Management at universities should strongly consider addressing the poor ethical culture among employees as this should form an integral part of the fraud prevention strategy.

8.3.1.9 Themes Relating to Deficient Internal Controls

Thematic analysis was conducted on question F4, which was intended to ascertain which internal controls are found to be deficient and provide the opportunity for fraud to be committed. The results indicate that the following deficient internal controls are significant contributors to providing the opportunity for fraud to be committed by employees:

- Non-compliance with policies and procedures, and
- Lack of management oversight.

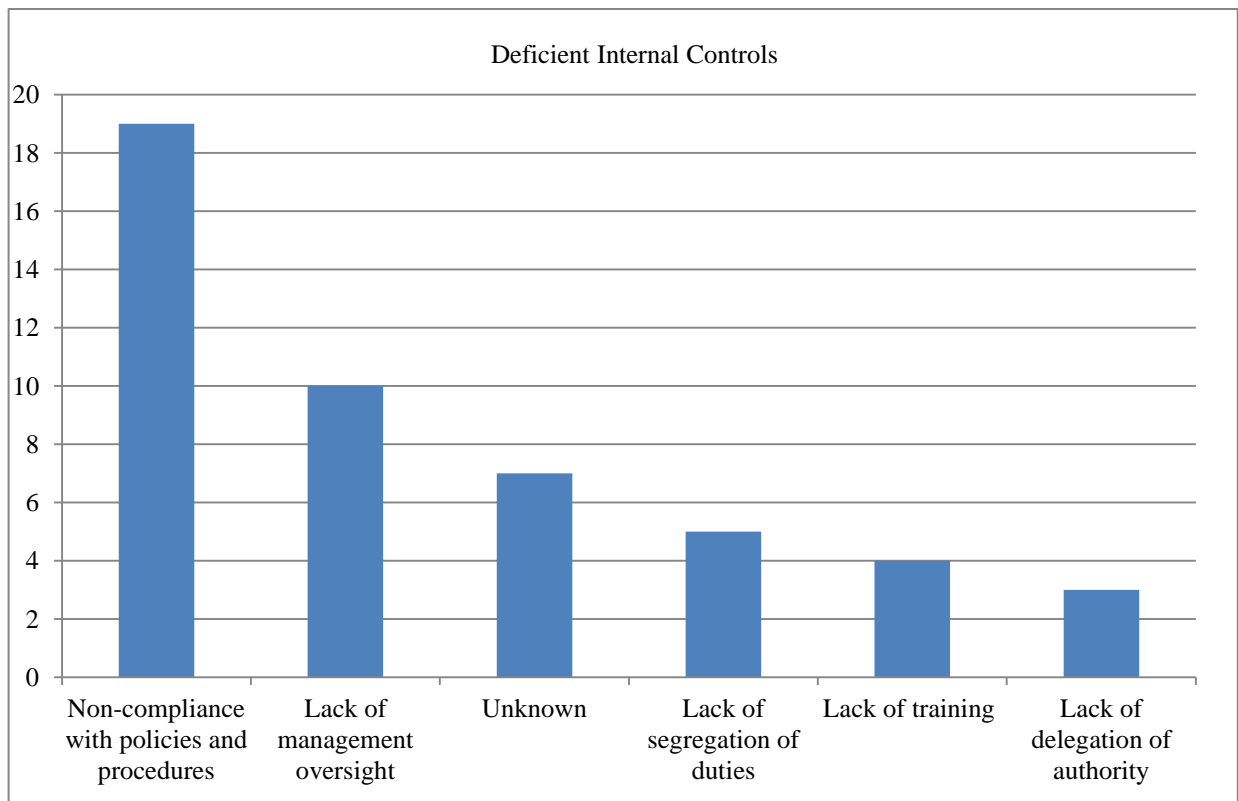
The knowledgeable individuals hold a similar view that the internal controls which are found to be deficient and provide the opportunity for fraud to be committed, are non-compliance with policies and procedures as well as a lack of management oversight.

The review of fraud case files revealed that there are two specific reasons why existing internal controls are rendered deficient. These are due to the dishonesty of the employees as well as collusion between employees and/or external parties.

This finding implies that respondents are of the view that policies and procedures exist within universities in KwaZulu-Natal; however, employees are not complying with them due to dishonesty and collusion among employees and external parties. The respondents also responded that management do not provide oversight over operations at the universities. When these two themes are jointly considered, there may be a correlation that employees are not complying with policies and procedures because there is a lack of management oversight. Employees may be aware of the lack of management oversight and therefore do not comply with policies and procedures. Policies and procedures are a type of internal control that is implemented by universities in KwaZulu-Natal to prevent fraud. Universities should ensure that there is compliance by enhancing management oversight over operations.

Figure 8.5 below shows the frequency distribution of six different themes of deficient internal controls that emerge after thematic analysis of this question (F4):

Figure 8.5: Themes relating to deficient internal controls



The figure above indicates that non-compliance with policies and procedures is the significant theme affecting the internal control environment of universities in KwaZulu-Natal and resulting in fraud.

Knowledgeable individuals were asked an open-ended question during the face-to-face interviews. They were asked whether they were able to provide any other causes of employee fraud. After analysis of their responses, two significant themes emerge. The themes are 'Employee Motive' and 'Behaviour'.

With regard to the motive of the fraudsters, they responded that the employees:

- Are living beyond their means;
- Commit fraud out of necessity;
- Are under personal financial pressure;
- Have a dependency on dual income which ends due to termination of employment of their spouse, and
- Are greedy.

Regarding employee behaviour, they expressed that the employees are:

- Arrogant;
- Negligent;
- Incompetent, and
- Submit falsified qualifications when they are employed.

This implies that the thorough vetting of prospective employees is essential in ensuring that universities do not employ personnel who have a propensity to commit fraud based on predisposed financial pressures, incompetence or falsified qualifications. According to Wolfe and Hermanson (2004:42), vetting and investigating or affirming the background of prospective employees will assist in understanding the capability of a person to commit fraud.

8.3.2 Results and Findings on the Nature of Employee Fraud

In this section, responses pertaining to the nature of employee fraud are expounded. Questions C1 to C14 were analysed to determine the percentage of responses that relate to "Never", "Rarely", "Sometimes", "Often" and "Always" responses per question. The closed-ended questions in this section of the online survey required the respondents to provide their

views on the nature of employee fraud committed at universities in KwaZulu-Natal in relation to the following:

- The university suffered financial loss due to frauds;
- Fraudsters work in a finance or procurement related role;
- Fraudsters collude with other employees and/or third parties to commit fraud;
- Fraudsters circumvent internal controls to commit the fraud;
- Internal controls are over-ridden by the fraudsters to commit the fraud;
- Fraudulent events are disguised to appear normal;
- Frauds relate to procurement of goods/services;
- Frauds relate to expense claims;
- Frauds relate to the falsification of documents/records;
- Frauds relate to a misuse/misappropriation of university resources;
- Solicitation of bribes;
- Frauds relate to a conflict of interest;
- The value of each fraud is below R100 000, and
- Management commits fraud.

A review of data from the fraud case files shows that the collusion between the employee and others as well as the falsification of documents are the two significant features of fraud. This result corroborates the views of the respondents that collusion and falsification of documents are characteristics of employee fraud at universities in KwaZulu-Natal.

8.3.2.1 Financial Loss

The results of analysis of this question indicated that universities in KwaZulu-Natal, significantly more than expected, suffered financial loss 'sometimes' or 'often' due to frauds committed. This implies that employee fraud significantly result in financial loss to universities. According to Snyman (1987:460), the victim (university) does not need to suffer actual loss because the definition of fraud includes actual or potential prejudice (loss) to the victim. Emanating out of the face-to-face interviews conducted with knowledgeable individuals, these experts are, significantly more than expected, of the view that universities in KwaZulu-Natal suffered financial loss 'often' or 'always' due to frauds committed.

The result of this question indicates that universities suffered actual loss. When employees collude with each other to commit fraud, the ACFE (2012:43) holds that the financial loss emanating out of such incidents are higher than when an employee commits the fraud on his/her own. The global survey by the ACFE (2012:5) found that the value of the loss was greater where the fraudster was employed for a longer period of time.

It follows then that fraud prevention measures should be targeted at early detection of fraud in order to minimise financial loss. According to Laufer (2011:402), victims of fraud such as universities in KwaZulu-Natal may suffer further prejudice attributed to legal costs, negative publicity and poor employee morale resulting from the fraud committed by an employee. Victim organisations, such as universities, spend money on legal fees and costs to institute formal disciplinary procedures against employees who commit fraud. These costs do not include the actual financial loss suffered as a result of the misappropriated funds. The hidden cost inherent in a fraud is not clearly visible, according to the ACFE (2014:8), because the situation can be compared to the proverbial iceberg. Only the direct loss of the fraud is clearly visible above the surface, while hidden costs lurk below the surface. Employee fraud at universities in KwaZulu-Natal cost these institutions more than just the actual loss. Universities should measure the financial loss due to employee fraud by also including costs to institute disciplinary, criminal and civil proceedings against the fraudster.

8.3.2.2 Finance or Procurement

Universities in KwaZulu-Natal are ‘sometimes’ or ‘often’ victims of fraud that is committed by employees who worked in a finance or procurement related role. The global survey by the ACFE (2014:55) also found that a significant number of fraudsters were employed in procurement and finance departments. The result indicates that universities should maintain closer scrutiny and oversight over areas of operations which involve finance or procurement processes. Finance and procurement related roles entail receiving and payment for goods and/or services, and employees working in such roles should be regarded as gatekeepers for university funds and assets. Universities should enhance recruitment and selection procedures especially when filling vacant positions in the finance or procurement departments.

8.3.2.3 Collusion

Respondents agree that ‘sometimes’ or ‘often’, the fraudsters collude with other employees and/or external parties to commit fraud. The ACFE (2012:43) found that employees who collude with others to commit fraud inflict larger financial losses against their employers compared to fraudsters who act alone. According to KPMG (2006:8), fraud prevention internal controls are inadequate and ineffective when there is collusion between employees to commit fraud. During the designing and implementing of fraud prevention strategies, universities should remain cognisant about the risk of employees colluding with colleagues or external parties to commit fraud. Internal controls are rendered superfluous when there is collusion between employees to commit fraud; therefore universities should consider alternative measures to prevent fraud that occurs through collusion.

8.3.2.4 Circumvention of Internal Controls

Internal controls are circumvented ‘sometimes’ or ‘often’ by fraudsters to commit fraud. The views of the respondents indicate that internal controls are not infallible. Jackson and Stent (2010:5/5) postulate that there are limits to the effectiveness of internal controls due to certain elements; one of which is the circumvention of internal controls. According to the Merriam-Webster Dictionary (2015), circumvent is defined as “*to get around something in a clever and sometimes dishonest way*”. Knowledgeable individuals hold that internal controls are circumvented ‘often’ or ‘always’ by fraudsters to commit fraud. Universities should take into consideration the risk of employees circumventing internal controls to commit fraud, when designing and implementing fraud prevention controls, by enhancing management oversight over operations at universities.

8.3.2.5 Over-riding of Internal Controls

Respondents hold the view that employees ‘sometimes’ or ‘often’ do over-ride existing internal controls with the intention to commit fraud. According to Turnbull (2005:7), strong internal controls can minimise risks that an organisation is exposed to, but it cannot obviate risks linked to the over-riding of internal controls. In the Merriam-Webster Dictionary (2015), over-ride is defined as “*to stop an action that is done automatically by using a special command*”. COSO (2013:4) postulates that the over-ride of internal controls by management could lead to the failure of the internal control environment. Management is responsible for

designing, implementing and monitoring internal controls. The views of the knowledgeable individuals are that employees ‘often’ or ‘always’ over-ride existing internal controls with the intention to commit fraud. The responses of the respondents implies that Universities have been susceptible to over-ride of internal controls by management, who are tasked with preserving the internal control environment. In this scenario, universities should rely on an independent audit and risk committee to maintain oversight over the internal control environment to prevent the over-ride of internal controls by management.

8.3.2.6 Disguise

Respondents hold the view that fraud is ‘sometimes’ or ‘often’ disguised to appear normal. The Merriam-Webster Dictionary (2014) defines fraud as “*deceit or trickery*”. The fundamental element of the crime of fraud is a misrepresentation. According to the Merriam-Webster Dictionary (2015), to misrepresent is to “*give someone a false idea about something*”. Fraud is difficult to detect when it is disguised as something it is not. This means that employees should be trained to identify fraud schemes within their work environment.

Krummeck (2000:271) suggests that organisations provide awareness training to employees about fraud and unethical conduct. This view is supported by Albrecht *et al.* (2006:111), Coenen (2008:159) and CIMA (2008:24), who hold that educating employees about the nature and extent of fraud contributes to the prevention of fraud. According to PwC (2009:15), EY (2013:1) and CIMA (2008:29), organisations should provide fraud awareness training to all employees. Universities should embark on a continuous fraud awareness training program where employees are educated about fraud and how to recognise and report it. CIMA (2008:29) suggests that employees who are trained about fraud would not use this knowledge to commit fraud themselves. On the contrary, employees will be empowered to identify fraud and report it to the relevant authority. Universities should consider embarking on a sustained fraud awareness training program as part of their fraud prevention strategy.

8.3.2.7 Procurement

The results of this question reflect that the respondent’s response is that fraud ‘sometimes’ or ‘often’ involves the procurement of goods/services. A similar result emanates when the respondents are asked whether fraudsters worked in a finance or procurement related role. According to results of the global survey conducted by the ACFE (2014:55), fraudsters were

predominantly employed in seven departments, one being procurement. Integral to a sound procurement process is a strong internal control environment. Regular audits should be conducted to ensure compliance with procurement policies and procedures. According to King III (2009:16), the audit committee should satisfy itself with the competence of the finance function of the organisation. According to PwC (2009:15), a sound control environment should include resilient recruitment and promotion processes. Universities should therefore consider appointing employees in the procurement department only after a rigorous recruitment and vetting process.

8.3.2.8 Expense Claims

The respondents hold the view that ‘sometimes’ or ‘often’, fraud at universities relates to the submission of expense claims. According to the ACFE (2014:71), a fraudulent expense claim involves an employee submitting claims for fraudulent expenses related, for example, to non-existent meals or inflated travel expenses. The ACFE (2014:15) found that employees involved in fraudulent expense claims were also involved in other fraud schemes such as cheque fraud and procurement fraud. Universities should scrutinise expense claim forms before authoring payment to employees. Should expense claim fraud be detected, universities should investigate to establish whether the employee also perpetrated other fraud schemes, as suggested by the ACFE.

8.3.2.9 Falsification of Documents

Respondents hold the view that the frauds ‘sometimes’ or ‘often’ relate to the falsification of documents. This result implies that employees are falsifying documents in order to perpetrate fraud against universities. The falsification of documents can be perpetrated in various ways. Universities should remain sceptical of all documents that are presented for approval. Fraud is a misrepresentation and is therefore not easily detectable. Universities should remain vigilant about the potential for falsified documents being used to perpetrate fraud.

8.3.2.10 Asset Misuse/Misappropriation

The views of the respondents are that the misuse/misappropriation of university resources are ‘sometimes’ or ‘often’ linked to fraud. The implication is that employees commit fraud by misusing or misappropriating (stealing) university assets. Universities should therefore ensure

that accurate records are maintained of all assets and that the disposal of obsolete assets are regularised.

8.3.2.11 Solicitation of Bribes

The respondents are of the view that ‘sometimes’ fraud relates to the solicitation of bribes from suppliers or students. The result is not significant. Universities should nevertheless consider the solicitation of bribes as a risk when developing or enhancing the fraud prevention strategy. The Prevention and Combating of Corrupt Activities Act 12 of 2004, is appropriate legislation which universities can rely on to combat fraud and corruption, coupled with a sound code of ethics.

8.3.2.12 Conflict of Interest

The views of the respondents are that fraud ‘sometimes’ or ‘often’ relates to a conflict of interest. Section 34 of The Higher Education Act (Act 101 of 1997) as amended, relates to employees conducting business with the university in which they are employed. The Act prohibits employees from contracting directly or indirectly with the university at which they work unless the Council of the relevant university agrees that the goods/services are unique, the company is a sole provider of the service and it is in the best interests of the university. Section 34 of this Act also places an onus on employees to make a written declaration to the university about any business that may constitute a conflict of interest or potential conflict of interest to the university before they take up their position at the university.

Knowledgeable individuals are also of the view that fraud ‘sometimes’ or ‘often’ relates to a conflict of interest. Universities should implement a system that would facilitate compliance with Section 34 of The Higher Education Act (Act 101 of 1997), such as the implementation of a register to record declaration of interests by employees.

8.3.2.13 Value of Loss

The result to the question, that the value of each fraud was below R100 000, shows that respondents hold the view that this is the case ‘sometimes’ or ‘often’. In terms of Section 34 of The Prevention and Combating of Corrupt Activities Act (Act 12 of 2004), there is an onus on persons who are in positions of authority to report corrupt transactions, including fraud,

involving an amount of R100 000 or more, to any police official. The ACFE (2014:65) found in the global survey that organisations do not report employee fraud to the police mainly because they fear negative publicity or that the ensuing disciplinary punishment is adequate.

The views of the knowledgeable individuals are that 'rarely' or 'sometimes' the value of each fraud is below R100 000. This may be the case because universities may be reluctant to engage external forensic auditing firms to investigate the fraud due to the low value of the loss and the high cost of the investigation. Universities should ensure that instances of fraud, amounting to the stipulated value, are reported to the police without undue delay. In effectively combating fraud, all incidents, irrespective of the value involved, should be reported to the police. Such an approach by the university could serve as a deterrent to other employees who may consider committing fraud.

8.3.2.14 Management

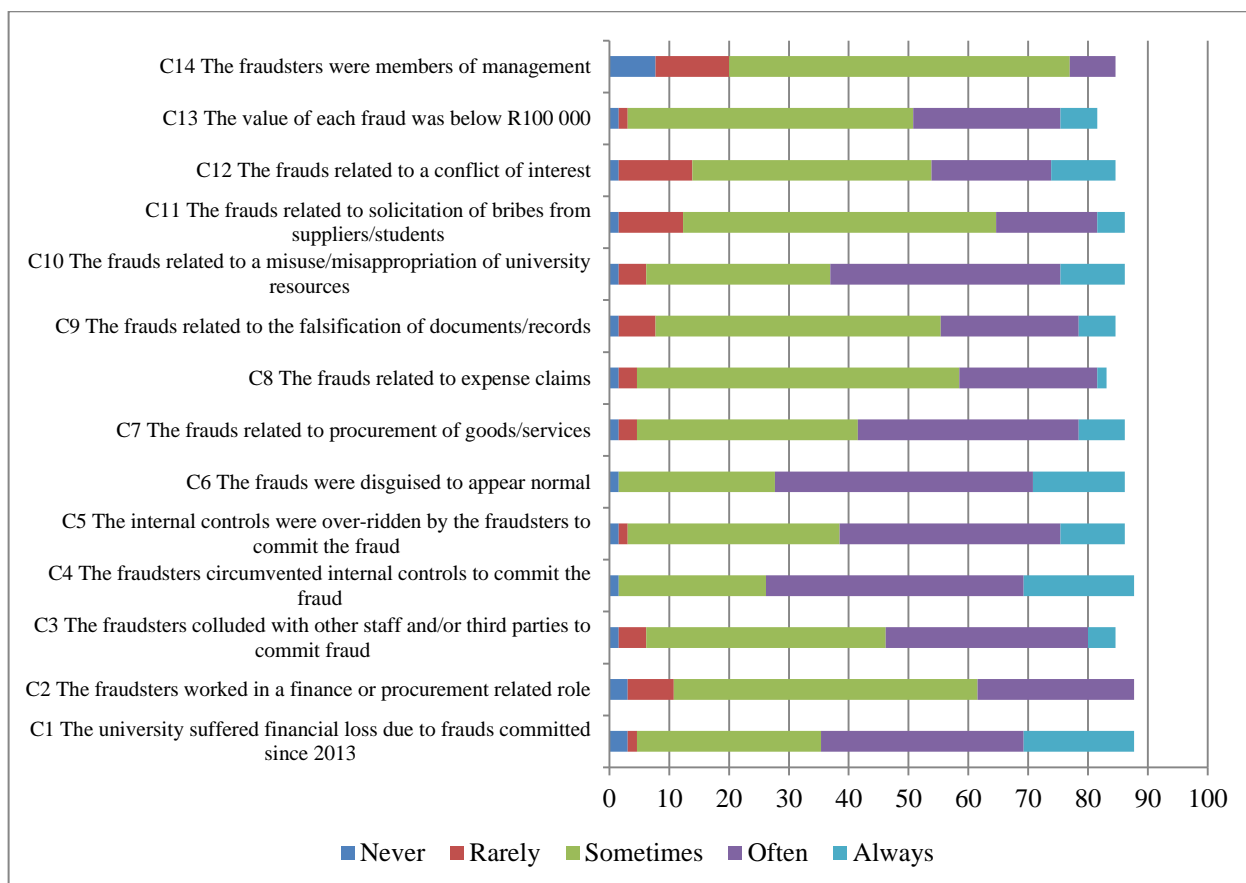
Respondents hold the view that within management are 'sometimes' the people who commit fraud. This result implies that universities are vulnerable to employee fraud committed by its management. According to the result of a global survey by KPMG (2011:4), 64% of employees who committed fraud held management and senior management positions. The global survey by PwC (2014:46) reveals that the trend of 62% of management and senior management committing fraud has not significantly changed over recent years.

Knowledgeable individuals hold the view that management are 'sometimes' or 'often' the employees who commit fraud at universities. University management has a fiduciary duty to protect public funds entrusted to them from fraud and abuse. In this regard, it is the responsibility of management to design and implement strong fraud prevention internal controls. The fraud prevention strategy of universities in KwaZulu-Natal should consider this risk by implementing strong mitigating internal controls and other relevant anti-fraud interventions.

8.3.2.15 Figure and Tables Depicting the Nature of Employee Fraud

The result of the percentages relating to the nature of employee fraud is provided in Figure 8.6 below:

Figure 8.6: Nature of employee fraud



The results of the Chi-square goodness-of-fit test indicate that significantly more than expected respondents ‘sometimes’ or ‘often’ indicate the nature of employee fraud at universities in KwaZulu-Natal. The results of the Chi-square goodness-of-fit tests are provided in Table 8.2:

Table 8.2: Results from Chi-square goodness-of-fit tests about the nature of employee fraud

Question	Result of Analysis	Chi-square goodness-of-fit test
C1	Sometimes or often	$(\chi^2 (4, N=57) = 33.614, p < .0005)$
C2	Sometimes or often	$(\chi^2 (4, N=57) = 66.421, p < .0005)$
C3	Sometimes or often	$(\chi^2 (4, N=55) = 52.182, p < .0005)$
C4	Sometimes or often	$(\chi^2 (4, N=57) = 46.947, p < .0005)$
C5	Sometimes or often	$(\chi^2 (4, N=56) = 47.214, p < .0005)$
C6	Sometimes or often	$(\chi^2 (4, N=56) = 48.821, p < .0005)$
C7	Sometimes or often	$(\chi^2 (4, N=56) = 49.536, p < .0005)$
C8	Sometimes or often	$(\chi^2 (4, N=54) = 80.815, p < .0005)$
C9	Sometimes or often	$(\chi^2 (4, N=55) = 55.818, p < .0005)$
C10	Sometimes or often	$(\chi^2 (4, N=56) = 40.786, p < .0005)$
C12	Sometimes or often	$(\chi^2 (4, N=55) = 33.182, p < .0005)$
C13	Sometimes or often	$(\chi^2 (4, N=53) = 63.509, p < .0005)$

The results of the Chi-square goodness-of-fit test for the following two questions (C11 and C14) indicate that significantly more than expected respondents indicate ‘sometimes’ that the:

- Frauds relate to solicitation of bribes from suppliers/students, and
- Fraudsters are members of management.

The results of the Chi-square goodness-of-fit tests for questions C11 and C14 are provided in Table 8.3 below:

Table 8.3: Results from Chi-square goodness-of-fit tests about the nature of employee fraud

Question	Result of Analysis	Chi-square goodness-of-fit test
C11	Sometimes	$(\chi^2 (4, N=56) = 63.286, p < .0005)$
C14	Sometimes	$(\chi^2 (4, N=55) = 79.818, p < .0005)$

The results of global fraud surveys, such as the PwC (2014:44) survey, confirm that male employees in management positions predominantly commit fraud as compared to their female colleagues. This does not imply that female managers do not commit fraud. To the contrary, global surveys such as ACFE (2014:49) reflect that 33% females commit fraud as compared to 67% of male employees.

During the face-to-face interviews that were conducted with knowledgeable individuals, they were asked an open-ended question. They were asked whether they were able to provide any other types of employee fraud. The analysis of their responses to this question resulted in the emergence of two significant themes, ‘Employment Fraud’ and ‘Unknown’. The theme ‘Unknown’ meant that the response is that they do not know of any other types of employee fraud.

Regarding the theme of ‘Employment Fraud’, the knowledgeable individuals provided the following responses, that employees:

- Capture non-existent employees on the payroll system and receive their salaries;
- Receive additional salaries without due authorisation;
- Falsify their curricula vitae (CV);
- Are selling intellectual property belonging to the university;
- Misappropriate funds from self-funded teaching programmes;
- Use university credit cards for personal benefit, and
- Do not disclose private remunerative work that they were undertaking.

In summary, the results and findings in this section imply that the nature of employee fraud at universities in KwaZulu-Natal have resulted in financial loss to universities due to fraud committed by employees. Universities also suffer further prejudice due to legal costs, negative publicity and poor employee morale emanating from fraud. Management oversight is essential over finance and procurement activities. In this regard, universities should strengthen recruitment and selection procedures for positions within the finance and procurement departments.

Another type of fraud is the collusion between employees, or employees colluding with external parties, to commit fraud. This is a realistic risk faced by universities in KwaZulu-Natal. The circumvention of internal controls is another area of risk which requires the enhancement of management oversight of operations at universities to prevent it. It is essential for an independent audit and risk committee to monitor the over-riding of internal controls by management. Employees should be educated about fraud through sustained fraud awareness training for all employees. Universities should subject prospective employees applying for positions in procurement departments, to a rigorous recruitment and vetting process. It is essential for universities to scrutinise expense claims because it is one of the methods used to commit fraud. The disposal of assets is an area that is susceptible to fraud and requires accurate record keeping. A code of ethics is essential to address the poor ethical culture prevailing at universities in KwaZulu-Natal. A conflict of interest policy, together with a register to record declarations of interest, are essential contributors to fraud prevention. Universities should report all incidents of fraud to the police irrespective of the value involved.

8.3.3 Results and Findings on Current Fraud Prevention Measures

This section expounds on the measures that have been implemented by universities in KwaZulu-Natal to prevent employee fraud. The objective of questions D1 to D19 was to understand the measures that are currently in place at universities in KwaZulu-Natal to prevent fraud. The respondents were required to answer questions in this section by providing their views about the following fraud prevention measures that are currently in place at universities:

- Fraud is investigated by internal university employees;
- Management designs and implements internal controls;
- There are adequate anti-fraud policies;

- Fraud prevention workshops are held;
- Internal controls are robust;
- Management designs internal controls in a structured manner;
- Internal controls prevent fraud;
- Incompatible duties are adequately segregated;
- University conforms to universal governance principles;
- Management is responsible for preventing fraud;
- Internal auditors are responsible for preventing fraud;
- External Auditors are responsible for preventing fraud;
- Audit & Risk Committees are responsible for preventing fraud;
- Fraud risks are managed in a systematic manner;
- Fraud risk management process is effective;
- Adequate action is taken to recover losses from fraudsters;
- Disciplinary action is taken against fraudsters;
- Fraudsters are criminally prosecuted, and
- Fraud awareness training is provided to employees.

8.3.3.1 Investigate Internally

The respondents indicate significant agreement with the statement that allegations of fraud are usually investigated by internal university employees. This indicates that fraud cases are not usually outsourced by universities in KwaZulu-Natal to external forensic investigating companies. There is also significant agreement by knowledgeable individuals that allegations of fraud are usually investigated by internal university employees. Universities should ensure that employees who conduct fraud investigations are suitably qualified and experienced to investigate fraud and testify at disciplinary, civil and criminal proceedings. Investigations into fraud are complex and require competent investigators who are familiar with relevant legislation and university policies. According to Albrecht *et al.* (2006:111), there should be a policy and procedure that sets out how investigations will be conducted.

8.3.3.2 Design and Implementation

There is significant agreement by the respondents that management is generally responsible for designing and implementing internal controls. There is also significant agreement by

knowledgeable individuals that management is generally responsible for designing and implementing internal controls. According to COSO (2013:15), internal control is the total responsibility of management.

8.3.3.3 Anti-fraud Policies

Respondents significantly agree that the universities in KwaZulu-Natal have adequate policies which address fraud risks. This implies that management has designed and implemented anti-fraud policies. Universities should ensure that employees are aware of these policies and that they comply with them. According CIMA (2008:44), it is essential for organisations to combat fraud by designing and implementing a fraud policy and response plan. One of the objectives of such a policy would be to set out the action that will be taken once fraud is detected or suspected.

8.3.3.4 Structured Approach

There is significant agreement by the respondents that management adopts a structured approach when designing internal controls. There are various frameworks and models that are available to assist management with designing internal controls. Universities should strive towards identifying potential fraud risks and design adequate and appropriate anti-fraud internal controls. The structured approach espoused by COSO (2013:32) is one example that should be considered by universities when designing and implementing internal controls.

8.3.3.5 Governance Principles

The respondents are in significant agreement that universities in KwaZulu-Natal conform to universal governance principles of fairness, accountability, responsibility and transparency. This specifically means that universities in KwaZulu-Natal have aligned their activities to the same governance principles espoused in King III (2009:6).

8.3.3.6 Management Prevents Fraud

There is significant agreement among respondents that management is responsible for preventing fraud at universities in KwaZulu-Natal. There is also significant agreement by knowledgeable individuals that management is responsible for preventing fraud at universities. Management should ensure that fraud is prevented at universities in a holistic manner and not

piecemeal. According to COSO (2013:39), management is responsible for designing, implementing and monitoring internal controls, including controls to prevent fraud.

8.3.3.7 Audit and Risk Committees

Respondents are in significant agreement that audit and risk committees are responsible for preventing fraud at the university. This implies that audit and risk committees are taking responsibility for a role for which management should be responsible. This finding is contrary to the paragraph above where the respondents agree that management is responsible for fraud prevention at universities. Should the respondents hold the view that management and audit and risk committees are jointly responsible to prevent fraud at universities, this is contrary to COSO (2013:39), which stipulates that the role of the board of directors (by implication, the audit and risk committee, as it is a sub-committee of the board) is, *inter alia*, to maintain oversight over the management process of designing and implementing internal controls. The view of COSO is further supported by King III (2009:34), which stipulates that audit committees should maintain oversight over internal controls and not design and/or implement them. Universities should not expect audit and risk committees to be responsible for fraud prevention as this is the responsibility of management.

8.3.3.8 Fraud Risk Management System

There is significant agreement by respondents that universities in KwaZulu-Natal manage fraud risks in a systematic manner. This implies that universities have adopted a structured approach towards fraud risk management. Universities should ensure that a comprehensive fraud risk management strategy and plan is in place, such as the strategy suggested by CIMA (2008:24) to combat fraud. There are various ways, according to CIMA (2008:24), to prevent fraud, including designing and implementing anti-fraud policies, procedures, preventive internal controls and fraud awareness training.

8.3.3.9 Disciplinary Action

Respondents hold the view that universities 'sometimes' and 'often' take disciplinary against fraudsters. Universities are preventing fraud by taking disciplinary action against employees who commit fraud. Such an intervention has a deterrent effect on other employees which dissuades them from committing fraud. Universities should ensure that they are consistent in

the application of disciplinary measures against employees who commit fraud. This implies that the value of the fraud should not determine the severity of the punishment. The disciplinary code of the university should stipulate that employees who commit fraud will be dismissed from employment if found guilty, irrespective of the value of the loss. According to COSO (2013:53), management should take disciplinary action against employees who fail to carry out their responsibilities relating to the execution of internal controls.

8.3.3.10 Criminal prosecution

Respondents hold the view that universities criminally prosecutes fraudsters 'sometimes'. This implies that there are instances where employees who commit fraud are not prosecuted. Fraud is a criminal offence in terms of Schedule 1 of the Criminal Procedure Act (Act 51 of 1977). Universities that do not report fraud to the police, where the amount is R100 000 or more, are guilty of an offence in terms of The Prevention and Combating of Corrupt Activities Act (Act 12 of 2004). Universities should criminally prosecute employees who commit fraud because this will serve as a deterrent to other employees who may contemplate committing fraud. Universities should institute criminal action against employees who commit fraud in addition to taking disciplinary action and civil litigation against them.

8.3.3.11 Fraud Awareness Training

Respondents agree that the university 'sometimes' provides fraud awareness training to employees. The implication is that fraud awareness training is not being provided to all employees on a sustained basis. The benefit of providing fraud awareness training to employees is significant. Authors such as Reidy and Theobald (2011:50), Krummeck (2000:269), Albrecht *et al.* (2006:111) and Coenen (2008:159), and CIMA (2008:24), hold the view that educating and making employees aware of fraud is an essential part of the fraud prevention intervention. Universities should ensure that the provision of sustained fraud awareness training forms part of the fraud prevention strategy.

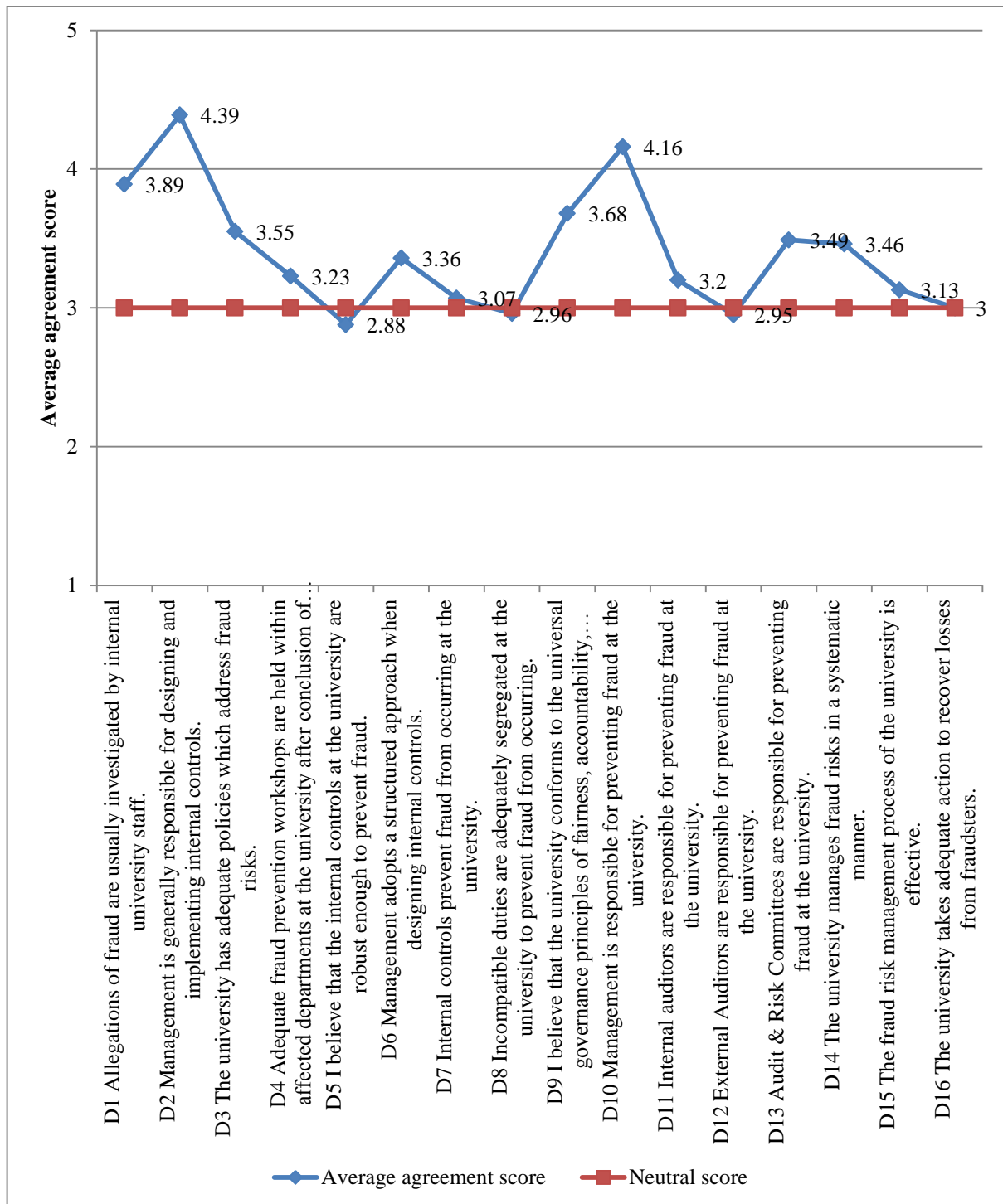
8.3.3.12 Figures and Tables on Fraud Prevention Measures

There is significant agreement amongst the respondents about the measures that are currently in place to prevent employee fraud from occurring at universities in KwaZulu-Natal. All respondents agree that:

- Allegations of fraud are usually investigated by internal university employees;
- Management is generally responsible for designing and implementing internal controls;
- The university has adequate policies which address fraud risks;
- Management adopts a structured approach when designing internal controls;
- Universities conform to the universal governance principles of fairness, accountability, responsibility and transparency in the way in which they operate;
- Management is responsible for preventing fraud at the university;
- Audit and Risk Committees are responsible for preventing fraud at the university, and
- The university manages fraud risks in a systematic manner.

The result of the analysis is reflected in Figure 8.7 below and it indicates that the scores for most questions are above the mean in this section. The questions relate to the fraud prevention measures that are currently in place at universities in KwaZulu-Natal.

Figure 8.7: Current fraud prevention measures at universities in KwaZulu-Natal



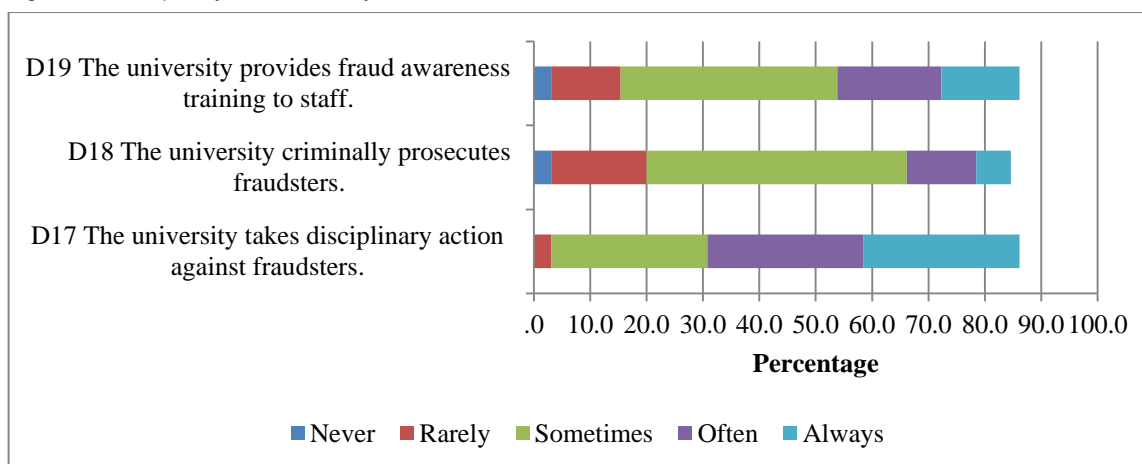
The results of analysis from the One-sample *t*-test on the current fraud prevention measures at universities in KwaZulu-Natal are reflected in Table 8.4 below. Only the results containing significant agreement are reported:

Table 8.4: Results from One-sample *t*-test analysis on the current fraud prevention measures

Question	Result of Analysis	One-sample <i>t</i> -test
D1	Significant agreement	(<i>t</i> (55) = 6.784, <i>p</i> <.0005, <i>M</i> = 3.89, <i>SD</i> = .985)
D2	Significant agreement	(<i>t</i> (55) = 17.570, <i>p</i> <.0005, <i>M</i> = 4.39, <i>SD</i> = .593)
D3	Significant agreement	(<i>t</i> (55) = 4.040, <i>p</i> <.0005, <i>M</i> = 3.55, <i>SD</i> = 1.025)
D6	Significant agreement	(<i>t</i> (55) = 2.500, <i>p</i> =.015, <i>M</i> = 3.36, <i>SD</i> = 1.069)
D9	Significant agreement	(<i>t</i> (55) = 4.774, <i>p</i> <.0005, <i>M</i> = 3.68, <i>SD</i> = 1.064)
D10	Significant agreement	(<i>t</i> (55) = 10.512, <i>p</i> <.0005, <i>M</i> = 4.16, <i>SD</i> = .826)
D13	Significant agreement	(<i>t</i> (54) = 3.649, <i>p</i> =.001, <i>M</i> = 3.49, <i>SD</i> = .998)
D14	Significant agreement	(<i>t</i> (53) = 3.758, <i>p</i> <.0005, <i>M</i> = 3.46, <i>SD</i> = .905)

In the section below, the fraud prevention measures that are currently in place at universities in KwaZulu-Natal are elaborated on. Questions D17 to D19 were analysed to determine the percentage of responses that relate to ‘never’, ‘rarely’, ‘sometimes’, ‘often’ and ‘always’ per question. The result of these percentages is provided in the Figure 8.8 below:

Figure 8.8: Disciplinary action taken by universities



The results of the Chi-square goodness-of-fit test indicate that significantly more than expected respondents indicate that ‘sometimes’ or ‘often’ the:

- The university takes disciplinary action against fraudsters.

The result of the Chi-square goodness-of-fit test is provided in Table 8.5 below:

Table 8.5: Results from One-sample *t*-test analysis on the current fraud prevention measures

Question	Result of Analysis	Chi-square goodness-of-fit test
D17	Sometimes or often	(χ^2 (4, N=56) = 31.143, <i>p</i> <.0005)

The results of the Chi-square goodness-of-fit test for the following two questions (D18 and D19) indicate that significantly more than expected respondents indicate ‘sometimes’ that the university:

- Criminally prosecutes fraudsters, and
- Provides fraud awareness training to employees.

The results of the Chi-square goodness-of-fit tests for questions D18 and D19 are provided in Table 8.6 below:

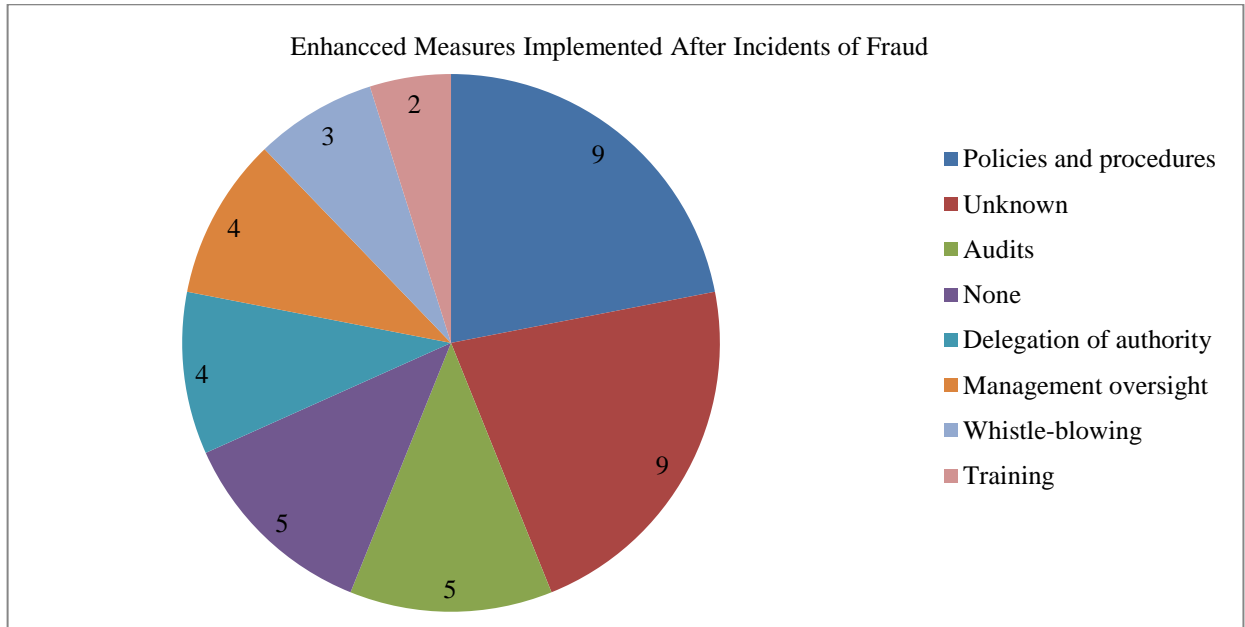
Table 8.6: Results from Chi-square goodness-of-fit tests about the current fraud prevention measures

Question	Result of Analysis	Chi-square goodness-of-fit test
D18	Sometimes	$(\chi^2 (4, N=55) = 45.455, p < .0005)$
D19	Sometimes	$(\chi^2 (4, N=56) = 25.964, p < .0005)$

8.3.3.13 Themes of Enhanced Internal Controls

An open-ended question (F5) in the online survey questionnaire aimed to establish the respondents' view on enhanced internal controls that are in place to prevent fraud from recurring at universities. Eight themes emerged among the responses provided by the respondents. The results indicate significantly that policies and procedures are implemented after fraud is detected at universities. An equally significant theme that emerged is that senior management and executive management are not aware of enhanced internal controls that are implemented after the detection of fraud. Emanating from the analysis of the results of interviews with knowledgeable individuals are the same two themes that are significantly high. Knowledgeable individuals hold the view that policies and procedures are implemented to prevent a recurrence of fraud. They also hold the view that no enhanced internal controls are implemented to prevent a recurrence of fraud. This result is concerning as fraud could probably recur if internal controls are not enhanced to prevent future frauds from taking place. The frequency distribution of these themes is depicted in Figure 8.9 below:

Figure 8.9: Measures implemented by universities



8.3.3.14 Management Response to Other Factors

Another open-ended question (F6) in the survey questionnaire required the respondents to express their view about how management addressed other factors that led to fraud being perpetrated by employees at universities. Eight themes emerged from the responses of the respondents. The significant themes that emerge are ‘Policies and Procedures’, ‘Unknown’, and ‘Risk Mitigation’. The significant themes that emerge from the responses of the knowledgeable individuals are similar to the results from the respondents, except that knowledgeable individuals responded that no actions is taken by management to address the other factors that lead to fraud being committed. The respondents differ in that they indicate that they are not aware (unknown) what action is taken by management. The results of a review of fraud case files show that the significant factor that provides the opportunity to the employee to commit fraud, is the lack of management oversight over the operations at the university.

Regarding the theme of ‘Policies and Procedures’, the different views of respondents are that management implemented the following:

- Enhanced internal controls;
- Regular review of policies and procedures;
- Principles and guidelines;
- Disciplinary processes;

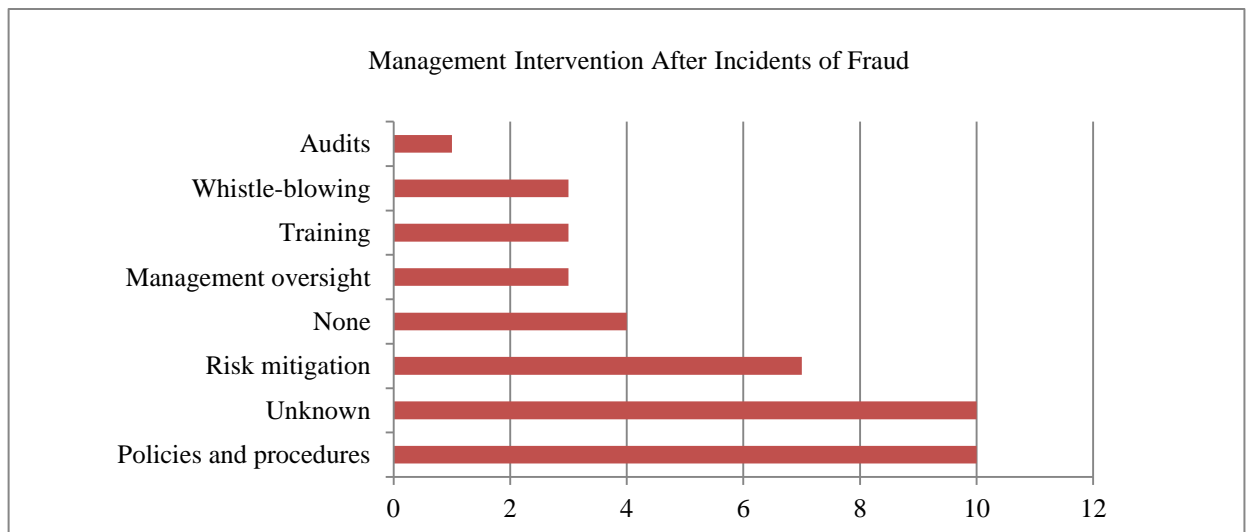
- Delegation of authority;
- Aggregation of cost centres, and
- Segregation of duties.

Regarding the theme of ‘Risk Mitigation’, the various responses of respondents are that management implemented the following:

- Investigations are conducted;
- Fraudsters are criminally prosecuted;
- Put in place strong internal fraud investigation capacity, and
- Took a zero-tolerance approach to fraud.

The frequency distribution of these themes is depicted in Figure 8.10 below:

Figure 8.10: Management intervention after incidents of fraud



The result which indicates that it is ‘Unknown’ by the respondents how management addressed the other factors which led to fraud being committed, should be of concern to universities in KwaZulu-Natal. This implies that management, who is responsible for preventing the recurrence of fraud, is unaware of what interventions are implemented after discovery of fraud at the universities. Universities should ensure that adequate and appropriate management intervention takes place after fraud is discovered to prevent a recurrence. Universities should also communicate the lessons learned and the risk mitigating interventions that were implemented after discovery of the fraud, to other members of management. This would serve the purpose of ensuring that a similar type of fraud does not occur in another department within the university.

Knowledgeable individuals were asked to respond to an open-ended question during the face-to-face interviews that were conducted with them. They were asked whether they were aware of other fraud prevention measures that are in place at universities. The analysis of their responses reflected one significant theme. The themes are 'None', meaning that they were not aware of other fraud prevention measures that are in place at universities.

A review of the fraud case files showed that the following measures were in place at the university before the fraud was committed:

- Segregation of duties;
- Delegation of authority, and
- Policies and procedures.

The review of the fraud case files revealed that the following interventions were implemented after the fraud was detected at the university.

- Management oversight has been enhanced;
- Code of conduct implemented;
- Fraud awareness training provided to employees;
- Blacklisting of suppliers;
- Enhanced internal controls, and
- Regular analysis of data.

The results and findings in this section imply that universities have implemented various fraud prevention measures. Universities should ensure that investigations into employee fraud are conducted by suitably competent individuals. It is the responsibility of management to design, implement and monitor internal controls. In this regard, management should ensure that there are adequate and effective anti-fraud policies in place and that all employees are aware of these policies and procedures. Management should ensure that internal controls are designed in a structured manner and in line with global best practice. Universities in KwaZulu-Natal conform to sound governance principles. It is the responsibility of management and not the audit and risk committee, which is an independent oversight body, to prevent fraud at universities. These institutions should ensure that they manage fraud risks in a systematic manner by means of a comprehensive fraud risk management strategy and plan. It is essential for management to take disciplinary action against employees who commit fraud, irrespective

of the value of the financial loss incurred. Universities should criminally prosecute perpetrators of fraud. They should ensure that they provide sustained fraud awareness training to all employees. The findings indicate that the respondents and knowledgeable individuals are of the view that universities in KwaZulu-Natal implemented policies and procedures after fraud was detected. Equally, the results also indicate that management were not aware of any enhanced measures that are implemented after incidents of fraud are detected. It is essential for universities to enhance internal controls after fraud is detected to prevent any recurrence.

8.3.4 Results and Findings on Additional Fraud Prevention Measures

There is significant agreement amongst the respondents about the additional fraud prevention measures that should be implemented at universities in KwaZulu-Natal. In this section, there is significant agreement by all respondents to the statements listed in E1 to E14 that:

- The university should have an internal audit department;
- The university should have an independent audit and risk committee;
- The university should have a code of ethics for all employees;
- The university should provide an anonymous whistle blowing hotline to enable employees and students to report suspicions of fraud;
- Executive Management should regularly communicate a strong ethical culture to employees;
- Management should investigate matters reported to it via the whistle-blowing facility;
- The university should conduct adequate ongoing identification and assessment of significant fraud risks (including root cause analysis and implementing mitigating controls);
- Management should design and implement internal controls and monitor these on an ongoing basis;
- Governance at the university should be based on current best practice;
- The university should conduct due diligence when employing people;
- The university should conduct due diligence when contracting with 3rd parties;
- The university should create awareness about the existence of the whistle-blowing facility to employees and students;
- The university should conduct forensic data analytics in order to detect fraud amongst large volumes of data, and

- The university should conduct surprise fraud audits.

The responses to the various questions have been grouped together insofar as they relate to similar aspects. These groups are elaborated on in the section below.

8.3.4.1 Audit

There is significant agreement by respondents that governance should be based on current best practice. Knowledgeable individuals are similarly in significant agreement that governance at the university should be based on current best practice. The current best practice such as those espoused by King III (2009:44) and COSO (2013:148), advocate the existence of an internal audit department and an independent audit and risk committee. Respondents also agree significantly, that universities should ensure that the internal audit function and audit and risk committee are in place. There is significant agreement by the knowledgeable individuals that universities should have an internal audit department. Universities should ensure that the internal audit departments, as well as the audit and risk committees, operate independently from management.

8.3.4.2 Ethics

The results of analysis of the responses of respondents indicate that there is significant agreement that the university should have a code of ethics for all employees and that executive management should also regularly communicate a strong ethical culture to employees. The knowledgeable individuals are in significant agreement that executive management should regularly communicate a strong ethical culture to employees. King III (2009:16) advocates that the board of directors should engender an ethical culture within the organisation with the assistance of management, who should create and implement a code for ethical conduct. According to CIMA (2008:28), management should act ethically and not adopt double standards by expecting their subordinates to conduct themselves differently. The view of CIMA is supported by Reidy and Theobald (2011:50), who aver that management should stimulate a sound ethical culture from the leadership level through leading by example and providing awareness training to employees. Universities in KwaZulu-Natal should ensure that management leads by example in line with the code of ethics.

8.3.4.3 Whistle-blowing

There is significant agreement among the respondents that the university should provide an anonymous whistle-blowing hotline facility to enable employees and students to report suspicions of fraud. The respondents also agree significantly that the university should create awareness about the existence of the whistle-blowing facility to employees and students. There is significant agreement also by the respondents that management should investigate matters reported to it via the whistle-blowing facility. Knowledgeable individuals held a similar view as mentioned above. According to Nilsen (2010:22), it is essential to provide an anonymous, confidential and independent system for reporting fraud as part of the fraud risk management process. Reidy and Theobald (2011:48) concur with the view that whistle-blowing programs are effective to combat fraud. Krummeck (2000:271) holds that employees must trust the system in order to report fraud. Universities should ensure that they implement a whistle-blowing facility that is trusted by employees and students because it operates independently, anonymously and confidentially.

8.3.4.4 Fraud Risk Assessment

The respondents reveal significant agreement that the university should conduct adequate ongoing identification and assessment of significant fraud risks, including conducting root cause analysis and implementing mitigating controls. According to PwC (2009:14), the fraud risk management program should incorporate an assessment of fraud risks. KPMG (2006:8) concur that emphasis must be placed on fraud risk assessment as part of leadership and governance. According to KPMG (2006:10), the fraud risk assessment process should identify the areas of risk by listing and categorising them, and thereafter rate the risks and mitigate them through enhanced internal controls. It will be beneficial to universities to conduct continuous fraud risk assessments and to enhance or implement internal controls to mitigate the risks.

8.3.4.5 Due Diligence

There is significant agreement among the respondents that the university should conduct due diligence when employing people and when contracting with external parties. The knowledgeable individuals are significantly in agreement with this statement as well. According to KPMG (2006:12), the fraud risk management process should include conducting

due diligence on potential employees, suppliers, clients and other stakeholders as part of the fraud prevention process. KPMG suggest that due diligence should be conducted at the commencement of an employment or business relationship process. Universities in KwaZulu-Natal should conduct continuous due diligence on all stakeholders in the quest to prevent fraud.

8.3.4.6 Forensic Data Analytics

Respondents reflect significant agreement that universities should conduct forensic data analytics in order to detect fraud amongst large volumes of data. This statement is also of the view of the knowledgeable individuals who were interviewed. KPMG (2006:22) suggests that conducting forensic analysis of data also reflects on the effectiveness of internal controls. According to the ACFE (2014:5), the results of their survey showed that many of the effective anti-fraud controls, such as data analysis, are overlooked by many organisations. The survey found that the presence of this control correlated with frauds that were 60% less costly and 50% shorter in duration. Universities should ensure that forensic analysis of data is conducted, which will contribute to the overall fraud risk management process.

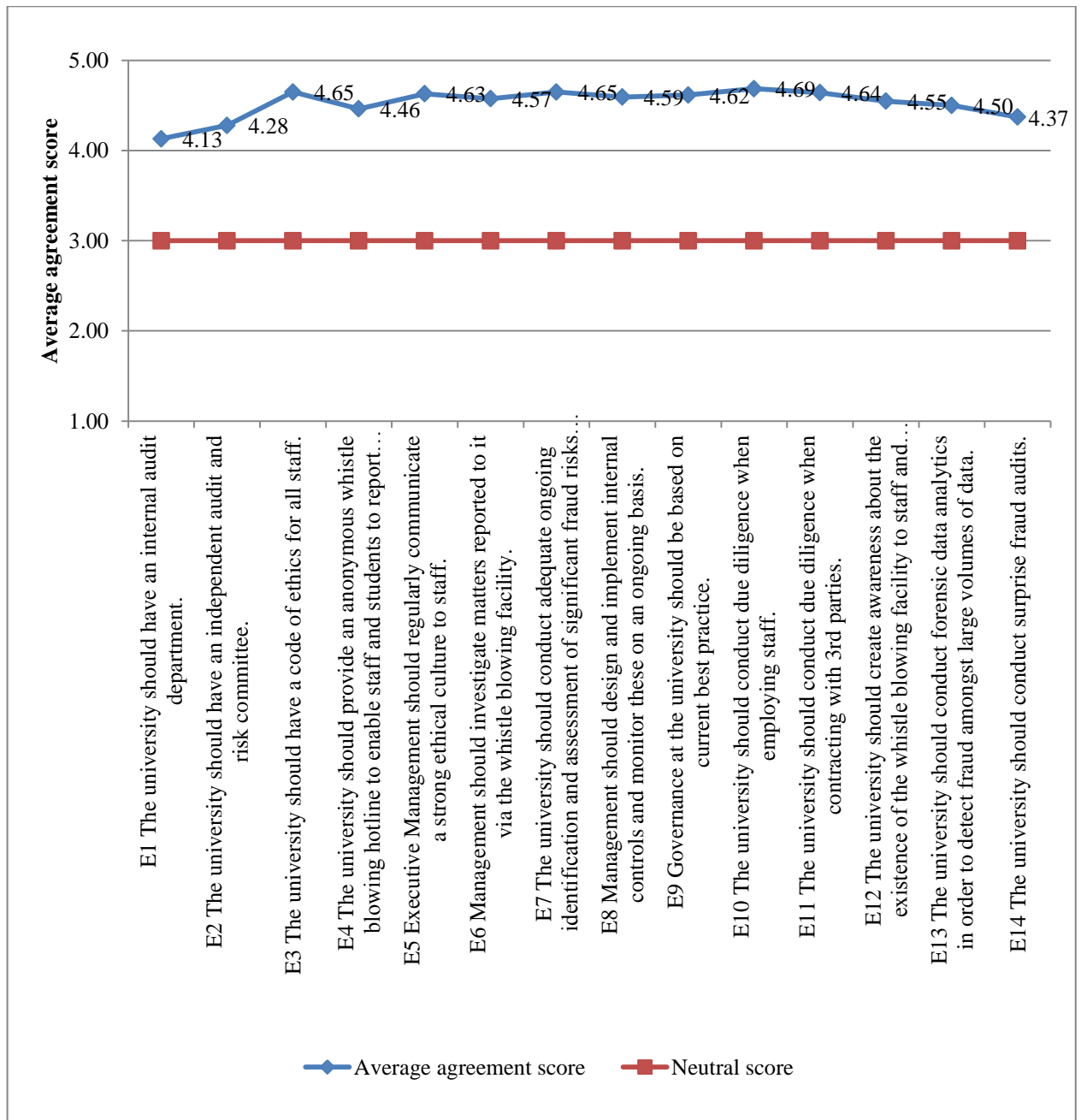
8.3.4.7 Surprise Fraud Audits

Respondents are in significant agreement that the university should conduct surprise fraud audits and that management should design and implement internal controls and monitor these on an ongoing basis. This significant agreement is reiterated by the knowledgeable individuals. According to the ACFE (2014:5), surprise audits and a dedicated anti-fraud department resulted in the reduction of loss due to fraud. Turnbull (2005:7) holds that the internal control environment includes, *inter alia*, the process of monitoring. Surprise fraud audits are a form of monitoring. Surprise fraud audits will be of benefit to universities in KwaZulu-Natal as a fraud prevention and detection measure.

8.3.4.8 Figures and Tables on Additional Fraud Prevention Measures

Figure 8.11 below depicts that all the result scores are above the mean for questions in this section. The questions below relate to additional global best practice fraud prevention measures that should be implemented at universities in KwaZulu-Natal:

Figure 8.11: Global best practice measures that should be implemented



The results of analysis from the One-sample *t*-test on the global best practices to prevent fraud at universities in KwaZulu-Natal are reflected in Table 8.7 below. All the results show significant agreement as reported below:

Table 8.7: Results from One-sample *t*-test analysis on global best practices to prevent fraud

Question	Result of Analysis	One-sample <i>t</i> -test
E1	Significant agreement	(<i>t</i> (53) = 8.373, <i>p</i> <.0005, <i>M</i> = 4.13, <i>SD</i> = .991)
E2	Significant agreement	(<i>t</i> (53) = 10.445, <i>p</i> <.0005, <i>M</i> = 4.28, <i>SD</i> = .899)
E3	Significant agreement	(<i>t</i> (53) = 25.126, <i>p</i> <.0005, <i>M</i> = 4.65, <i>SD</i> = .482)
E4	Significant agreement	(<i>t</i> (51) = 11.766, <i>p</i> <.0005, <i>M</i> = 4.46, <i>SD</i> = .896)
E5	Significant agreement	(<i>t</i> (53) = 16.906, <i>p</i> <.0005, <i>M</i> = 4.63, <i>SD</i> = .708)
E6	Significant agreement	(<i>t</i> (53) = 16.774, <i>p</i> <.0005, <i>M</i> = 4.57, <i>SD</i> = .690)
E7	Significant agreement	(<i>t</i> (53) = 25.126, <i>p</i> <.0005, <i>M</i> = 4.65, <i>SD</i> = .482)
E8	Significant agreement	(<i>t</i> (53) = 23.597, <i>p</i> <.0005, <i>M</i> = 4.59, <i>SD</i> = .496)
E9	Significant agreement	(<i>t</i> (51) = 20.600, <i>p</i> <.0005, <i>M</i> = 4.62, <i>SD</i> = .565)
E10	Significant agreement	(<i>t</i> (53) = 24.403, <i>p</i> <.0005, <i>M</i> = 4.69, <i>SD</i> = .507)
E11	Significant agreement	(<i>t</i> (52) = 21.418, <i>p</i> <.0005, <i>M</i> = 4.64, <i>SD</i> = .558)
E12	Significant agreement	(<i>t</i> (52) = 19.623, <i>p</i> <.0005, <i>M</i> = 4.55, <i>SD</i> = .574)
E13	Significant agreement	(<i>t</i> (53) = 15.891, <i>p</i> <.0005, <i>M</i> = 4.50, <i>SD</i> = .694)
E14	Significant agreement	(<i>t</i> (53) = 13.710, <i>p</i> <.0005, <i>M</i> = 4.37, <i>SD</i> = .734)

The results emanating from the analysis of data collected from the knowledgeable individuals similarly indicate significant agreement on all 14 statements listed above.

8.3.4.9 Bivariate Analysis

Bivariate analysis of questions D1 and E6 were conducted. The questions relate to allegations of fraud that are usually investigated by internal university employees and management investigation into matters reported to it through the whistle-blowing facility respectively. There is a strong positive correlation between these two questions ($r = 0.374$, $p=.005$). The respondents who agree that allegations of fraud are usually investigated by internal university employees also agree that management should investigate matters reported through the whistle-blowing facility. Krummeck (2000:271) holds that employees who are confident that the system works will report fraud. Universities should ensure that allegations of fraud that are reported are investigated and resolved.

8.3.4.10 Themes on Management Interventions to Prevent Fraud

An open-ended question (F1) in the online survey questionnaire aimed to establish the respondents' view on the type of interventions that management should embark on to prevent incidents of employee fraud at universities. Five themes emerge among the responses provided by the respondents. The significant themes are 'Internal Controls', 'Risk Mitigation' and 'Training'. The themes emanating from the analysis of the responses of the

knowledgeable individuals are similar to the three significant themes found from the respondents.

Under the theme of 'Internal Controls' the respondents provide the following views in respect of interventions that management should embark on to prevent fraud:

- Enhanced internal controls;
- Less restrictive controls;
- Simplified internal controls;
- Continuous monitoring;
- Disciplinary action;
- Vetting of employees;
- Delegation of authority, and
- Compliance with policies and procedures.

Management indicated that internal controls are an intervention that should be embarked upon to prevent employee fraud. Management is of the view that internal controls should be enhanced but should be less restrictive and simple. It would be essential for management to continually monitor the internal controls to ensure that they are adequate and functioning as intended. Employees who violate internal controls should be subjected to disciplinary action. Management is also of the view that employees should be adequately vetted prior to employment. Employees should be given written delegations of authority which stipulate the limits of the delegation per employee. Management held the view that employees should comply with policies and procedures. This implies that management has an essential role to play in designing, implementing and monitoring internal controls at universities in order to prevent employee fraud.

Under the theme of 'Risk Mitigation' the respondents provide the following views in respect of intervention that management should embark on to prevent fraud:

- Surprise audits;
- Internal and external audits;
- Develop and implement fraud prevention strategy and monitor its effectiveness;
- Whistle-blowing;
- Regular fraud risk assessments;

- Zero tolerance to fraud;
- Thorough investigation;
- Criminal prosecution of fraudsters;
- Active management oversight;
- Conducive environment that is alert to employee circumstances;
- Identification of high risk individuals;
- Proper remuneration of employees, and
- Recognition for good service, clean audits and well-run divisions.

Management also indicated that risk mitigation is an essential intervention that would prevent employee fraud at universities. Management holds that audits are essential in preventing fraud. When developing, implementing and monitoring a fraud prevention strategy, management should include whistle-blowing and fraud risk assessments. Employee fraud could be prevented at universities by means of thorough investigations and the criminal prosecution of fraudsters. This implies that universities should not tolerate fraud in any manner or form. Management oversight over operations is essential to identify employees that are prone to commit fraud due to personal circumstances. Employees should be appropriately rewarded and recognised in order to prevent employee fraud at universities in KwaZulu-Natal.

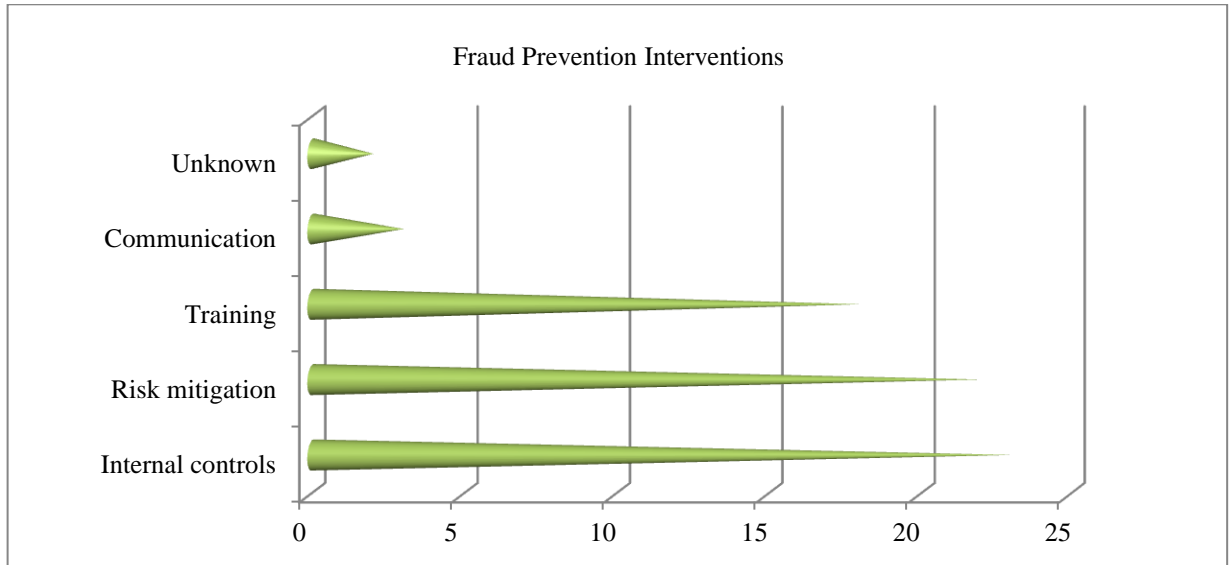
Under the theme of ‘Training’, the respondents provide the following views in respect of interventions that management should embark on to prevent fraud:

- Continuous fraud awareness, and
- Ethics training.

This theme indicates that management should provide adequate training to employees about fraud risks and ethics, on a continuous basis.

The frequency distribution of all the themes mentioned above is depicted in Figure 8.12 below:

Figure 8.12: Fraud prevention initiatives



The responses of management about the interventions that should be implemented by universities to prevent employee fraud indicate a strong inclination towards internal controls, risk mitigation and training.

8.3.4.11 Themes about Internal Controls that Prevent Fraud

A further open-ended question (F2) aimed to establish the respondents' view on examples of internal controls that prevent employee fraud from occurring at universities. There are nine themes that emerge from the respondents' responses. The four significant themes that emerge are 'Policies and Procedures', 'Delegation of Authority', 'Segregation of Duties' and 'Management Oversight'. Analysis of the data collected from the interviews held with knowledgeable individuals revealed three significant themes. The themes are similar to those mentioned above, excluding the delegation of authority. These themes are explained below.

The theme of 'Policies and Procedures' that emanate from the views of the respondents about examples of internal controls that prevent employee fraud, are as follows:

- Compliance;
- Disciplinary process;
- Enhanced internal controls;
- Passwords;
- Vehicle log books;
- Roles, responsibilities and accountability;

- Stock take;
- Asset verification;
- Audit trail, and
- Dedicated human resources.

It is the view of the respondents that compliance with policies and procedures of the university is essential to prevent employee fraud. The respondents hold the view that employees who do not comply with policies and procedures should be subjected to disciplinary action against them. The respondents hold that internal controls should be enhanced. Some suggest internal controls include the use of passwords for printing, photocopying and office telephones. Employees who use university vehicles should be provided with a log book that should be filled in for trips undertaken in that vehicle. The roles, responsibilities and accountability of employees should be clearly stipulated. Respondents responded that regular stock taking and physical verification of assets are essential internal controls that could prevent employee fraud at universities. Documents relating to the procurement of goods or services should be safeguarded to ensure that there is an audit trail of the process. The respondents also hold that there should be sufficient employees allocated to carry out tasks, because the practice of having fewer employees execute multiple tasks renders the university prone to fraud.

The next theme that emanates about internal controls that prevent employee fraud from occurring was 'Delegation of Authority'. Respondents are of the view that authority should be delegated appropriately to employees with due consideration being given to having multiple approvers within the various operations of universities.

'Segregation of Duties' is a further theme that was identified from the views provided by the respondents. Segregation of incompatible duties is essential in preventing employee fraud at universities.

The theme of 'Management Oversight' entailed the following:

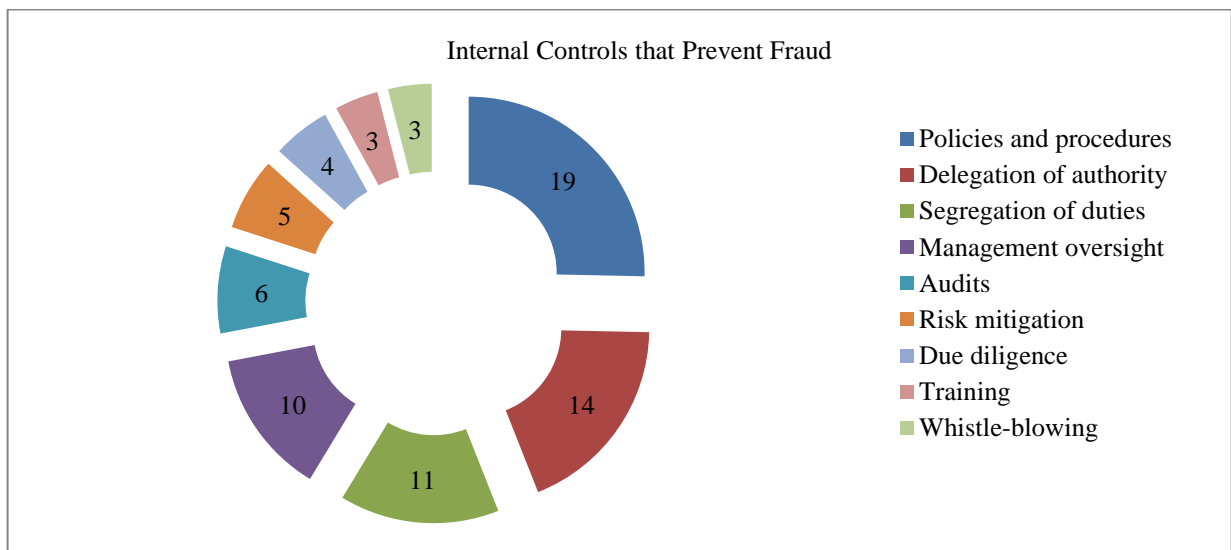
- Physical access control;
- Controlled distribution of assets;
- Continuous monitoring;

- Reconciliations;
- Verification of data in financial forms, and
- Communication with the Finance Department.

The respondents are of the view that management should implement internal controls for the physical access to goods and other assets. The distribution of assets should be subject to stringent controls in order to prevent employee fraud at universities. Management should continuously monitor the internal controls that are in place to ensure implementation and compliance. Respondents hold that regular reconciliations should form part of management oversight over the operations at universities. Another essential internal control that is identified by the respondents is that management should verify information that is reflected in financial documents before authorising payment. In this regard, regular communication with the Finance Department is found to be essential.

The frequency distribution of these themes is depicted in Figure 8.13 below:

Figure 8.13: Internal controls that prevent fraud



The identified themes indicate that internal controls are vital for the prevention of employee fraud at universities in KwaZulu-Natal in particular and at universities in general. One of the most significant internal controls in this regard is the existence of policies and procedures.

8.3.4.12 Themes about Other Fraud Prevention Interventions

The respondents were asked an open-ended question (F3) and to express their views about other interventions that would prevent employee fraud, apart from internal controls. Although ten themes emerged, only the top four themes are elaborated on below. These four themes are 'Training', 'Risk Mitigation', 'Ethics' and 'Management Oversight'. There are two significant themes that are identified from the responses received from the knowledgeable individuals. These are risk mitigation and ethics.

The theme of 'Training' emanate as the most significant intervention, apart from internal controls, to prevent employee fraud at universities. The views of the respondents are that there should be continuous fraud awareness training provided to employees.

'Risk Mitigation' is another theme that emerged from the responses of the respondents. The following specific issues were provided by respondents when asked what other interventions would prevent employee fraud:

- Blacklisting of fraudsters;
- Employee wellness;
- Support for employees in financial distress;
- Criminal prosecution, and
- National register.

The respondents held the view that fraudsters should be blacklisted in order to prevent them from securing employment at other universities. Some respondents went so far as to suggest that a national register should be implemented in order to deter other employees from committing fraud. Respondents were also of the view that universities should criminally prosecute employees who commit fraud. They suggested that universities should be aware of the personal circumstances of employees such as their gambling, drug and alcohol addiction, as well as those who are under financial stress. Albrecht (1998:113) holds that such types of pressure contribute towards employees committing fraud because they do not have anyone to speak to about their problem. Universities should consider providing employee wellness programs to assist in reducing the pressures faced by employees.

The theme of 'Management Oversight' emerged from the responses received. The following specific suggestions are provided by the respondents as other interventions that would prevent employee fraud:

- Continuous monitoring;
- Segregation of duties, and
- Management oversight.

The respondents held that management should regularly oversee operations and monitor the internal control environment continuously. The segregation of duties is essential, especially when there are incompatible duties being carried out by one employee. Such a situation provides an unscrupulous employee with an opportunity to commit fraud without being detected. This implies that management should be vigilant and ensure that incompatible duties are adequately segregated or other internal controls implemented.

Another intervention that would prevent employee fraud is identified as the theme of 'Ethics'. Respondents hold that the following aspects contribute to fraud prevention at universities:

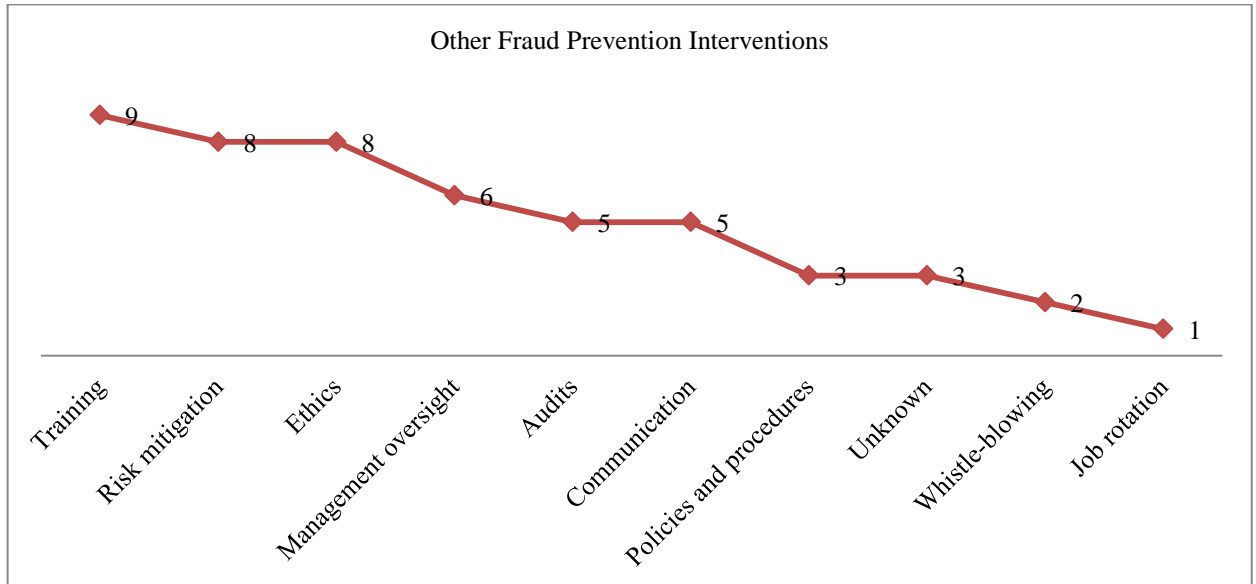
- Code of ethics;
- Ethics training;
- Sound ethical culture;
- Zero tolerance to fraud, and
- Trusting the employees more (which will lead to an improved anti-fraud culture.)

The view of the respondents was that employee fraud can be prevented at universities by inculcating a sound ethical culture. The respondents suggested that designing and implementing a code of ethics and providing employees with continuous training about the ethical culture of the university, would lead to the prevention of fraud. Respondents were of the view that universities should not tolerate fraud in any form. This implies that universities should act consistently against fraudsters irrespective of the value of the loss, the nature of the fraud or the position of the employee. One respondent was of the view that universities should trust employees explicitly because this would lead to an enhanced anti-fraud culture. This view is contrary to the findings of global studies, such as the ACFE (2014:53), which found that employees who have worked for a long period of time become highly trusted, resulting in a relaxation of the review and monitoring of their work. Such employees are

familiar with the anti-fraud internal controls that are in place at universities and are in many instances aware of the loopholes in them as well. These trusted employees are in a position to exploit the weaknesses in the internal controls to commit fraud.

The frequency distribution of the themes is depicted in Figure 8.14 below:

Figure 8.14: Other fraud prevention interventions



The figure above indicates that management has identified essential fraud prevention interventions that could be implemented at universities. The figure also indicates that there are various interventions that universities in KwaZulu-Natal should implement to prevent employee fraud.

Knowledgeable individuals were interviewed on a face-to-face basis. They were asked an open-ended question to determine whether they are aware of other global best practice fraud prevention measures that could be implemented at universities. Two significant themes emerge after analysis of their responses. The themes are ‘None’ and ‘Data Analysis’. The theme of ‘None’ meant that they are not aware of other global best practice fraud prevention measures that could be implemented at universities.

With regard to the theme of ‘Data Analysis’, the knowledgeable individuals provided the following responses, namely, that universities should:

- Conduct trend analysis to detect for favouritism towards suppliers;
- Analyse data to detect value for money received, and

- Analyse data for purchases against actual usage.

The results and findings of this section indicate that universities in KwaZulu-Natal should implement additional fraud prevention measures. Governance at universities should be based on current best practice. In this regard, universities should have an independent audit and risk committee and internal audit department. It is essential for universities to have a code of ethics for employees which must be regularly communicated by executive management, who should also lead by example. Whistle-blowing is essential in addressing fraud. Universities should ensure that an independent whistle-blowing facility is provided. There should be regular awareness campaigns undertaken to highlight the existence of the facility to employees. It is essential that management investigates the allegations that are received through the whistle-blowing facility. Another fraud prevention measure that universities should implement is the continuous assessment of fraud risks. There is significant agreement among respondents that the university should conduct due diligence when employing people and when contracting with external parties. Universities should conduct forensic data analyses as these will assist in detecting fraud, according to the significant agreement by respondents and knowledgeable individuals. Respondents and knowledgeable individuals are also in significant agreement that surprise fraud audits are essential in the prevention and detection of fraud.

The frequency distribution of themes arising out of the open-ended questions indicates that the respondents and knowledgeable individuals held the view that 'Internal Controls', 'Risk Mitigation' and 'Training' are three significant themes that address the type of interventions that management should embark on to prevent employee fraud at universities. The frequency distribution of themes, about internal controls that prevent fraud, shows that the respondents and knowledgeable individuals held the view that policies and procedures, segregation of duties and management oversight are the three significant themes.

Arising out of the responses received from the respondents about other interventions that would prevent employee fraud, four significant themes emerged from the frequency distribution. These are 'Training', 'Risk Mitigation', 'Ethics' and 'Management Oversight'. The significant themes emerging from knowledgeable individuals are 'Risk Mitigation' and 'Ethics'.

8.4 SIMILARITY OF CERTAIN FINDINGS

An analysis of the results emanating out of the survey questionnaire, face-to-face interviews and fraud case files reveal certain similar findings. These results validate the similar findings which emanate from different data sources. These similarities in the findings relate to the research focus areas of:

- Causes of employee fraud;
- Nature and extent of employee fraud;
- Measures that are currently in place to prevent fraud, and
- Additional fraud prevention measures that could be recommended.

These findings have been grouped together insofar as they relate to similar themes and/or where they refer to a combination of focus areas of this research. The grouped findings are explained further in the sections below.

8.4.1 Nature of Employee Fraud and Current Prevention Measures

There is agreement between the respondents and knowledgeable individuals that universities in KwaZulu-Natal have been victims of known employee frauds and have suffered financial losses due to these frauds. There is a differing view between the respondents and knowledgeable individuals insofar as the value of the loss to fraud is concerned. The latter are not in agreement that the value of the loss to each fraud is below R100 000. This result implies that knowledgeable individuals are unaware of the cost of the fraud being incurred by universities in KwaZulu-Natal because frauds are investigated internally by management. Management may hold their view that the value of the loss due to fraud incidents is below R100 000 based on the incidents of employee fraud of which they are aware. Similarly, the knowledgeable individuals may hold their view that the value of the loss due to fraud is more than R100 000 based on the incidents of employee fraud that they have investigated at universities in KwaZulu-Natal. Irrespective of the value of the loss suffered, it is essential for universities in KwaZulu-Natal to ensure that adequate action is taken to recover losses from fraudsters, and that disciplinary action is taken against fraudsters, including criminal prosecution.

There is agreement between the respondents and knowledgeable individuals that management is responsible for preventing fraud at universities in KwaZulu-Natal. Best practice such as that advocated by COSO (2013:15), is that designing and implementing internal controls is solely a management responsibility. This research has confirmed that management is responsible for designing and implementing internal controls in order to prevent fraud.

Respondents and knowledgeable individuals are also in agreement that management itself can be a perpetrator of fraud. Global surveys such as those conducted by PwC (2014:46) have also found that 62% of management and senior management have committed fraud. This result is of specific concern taking into consideration that management is tasked with preventing fraud but are the very same employees who are committing fraud at universities in KwaZulu-Natal.

8.4.2 Nature and Causes of Employee Fraud

The respondents and knowledgeable individuals are in agreement that employee fraud at universities in KwaZulu-Natal relates to the falsification of documents. This finding is also confirmed by an analysis of the frequency distribution of themes that emerged from the review of the fraud case files. The knowledgeable individuals are also in agreement with the respondents that the frauds at universities relate to conflicts of interest that arise between employees and the business that are awarded by them on behalf of the universities in KwaZulu-Natal to suppliers with whom a conflict of interest existed. It is essential for universities to be cognisant of these factors when designing and implementing fraud prevention strategies.

8.4.3 Nature and Causes of Fraud and Current and Required Prevention Measures

There is agreement by both the respondents and knowledgeable individuals with the statement that fraudsters circumvent internal controls in order to commit fraud at universities in KwaZulu-Natal. This finding is contrary to the views expressed by the respondents that current internal controls that are in place at universities are resilient against fraud. The circumvention of internal controls by employees, in order to commit fraud, provides an opportunity for dishonest employees to carry out this deed. Another finding that differs from the views of the respondents, that current internal controls are resistant to fraud, is the view that respondents agree that inadequate controls led to employees committing fraud. It is essential that universities implement enhanced internal controls after the discovery of employee fraud, such

as what is found after an analysis of the fraud case files during this research. Such enhanced internal controls will obviate a recurrence of similar fraud.

Both the respondents and the knowledgeable individuals are in agreement that internal controls are over-riden by the fraudsters to commit the fraud. In order to mitigate instances where management over-rides internal controls to commit fraud, the audit and risk committee should maintain oversight over the internal control environment. One of the themes that emanated from the frequency analysis of the themes from open-ended questions in the survey, face-to-face interviews with knowledgeable individuals and fraud case files, is the 'Delegation of Authority'. Appropriate delegation of authority limits to management should be considered as an essential fraud prevention intervention.

Respondents and knowledgeable individuals are in agreement that fraudsters collude with other employees and/or third parties to commit fraud. Respondents are in agreement that employees solicit bribes from suppliers in order to collude in perpetrating fraud against universities in KwaZulu-Natal. This result implies that internal controls are rendered ineffective and inadequate where there is collusion, which is also the view of KPMG (2006:8). Universities should consider this risk when designing anti-fraud internal controls. In this regard, an analysis of the fraud case files revealed that the university had blacklisted the suppliers that were found to have colluded with university employees to commit fraud. Universities should also ensure that suppliers abide by a code of ethics in their interaction with the universities.

8.4.4 Causes of Employee Fraud and Current and Required Prevention Measures

A lack of management oversight is found to be one of the causes of employee fraud at universities in KwaZulu-Natal, according to the views of the respondents and knowledgeable individuals. These views are corroborated by the findings emanating from the analysis of fraud case files where the lack of management oversight is found to be one of the causes of employee fraud. The result from the analysis of the fraud case files revealed that management enhances oversight over operations after fraud is discovered at the university. It is essential for management to be proactive and enhance oversight over operations at universities in KwaZulu-Natal. An analysis of the themes that emanate from the open-ended questions revealed that both the respondents and knowledgeable individuals agree that management oversight should be implemented to prevent fraud. According to COSO (2013:81), poor management oversight

provides employees with the opportunity to commit fraud. This research has confirmed that management oversight is essential for the prevention of employee fraud.

According to the respondents, another cause of employee fraud is the existence of a poor ethical culture at universities in KwaZulu-Natal. Respondents are also of the view that the university should have a code of ethics for all employees and that executive management should regularly communicate a strong ethical culture to employees. An analysis of the fraud case files reveals that one of the interventions that management implemented after the discovery of fraud was a code of conduct for employees. Results of the analysis of the open-ended questions, to which the respondents and knowledgeable individuals provided their views, indicate that a code of ethics is essential as a fraud prevention intervention. According to COSO (2013:35), a code of conduct is essential for an organisation because it stipulates what is considered right and wrong. CIMA (2008:28) advocates that organisations should go beyond just designing and implementing a code of ethics by inculcating an ethical culture, starting from management who needs to lead by example. According to KPMG (2006:11), a code of conduct communicates the standards of ethical conduct of the organisation to employees, clients, suppliers and stakeholders.

8.4.5 Current and Required Prevention Measures

Both the respondents and knowledgeable individuals are in agreement that fraud is investigated by internal university employees. According to KPMG (2006:20), it is essential for organisations to respond to allegations of fraud by investigating them. The process of investigating fraud also serves the purpose of preventing fraud from taking place, because employees will be aware that there is a likelihood that they may be caught out should they consider committing fraud against the university.

Another fraud prevention intervention that emanated from the research is the need for fraud awareness training. Respondents are of the view that fraud awareness training is provided to employees at the university. The result from the analysis of fraud case files corroborates the view of the respondents that fraud awareness training is provided to employees. The analysis of the views to open-ended questions by the respondents and knowledgeable individuals reveals that the provision of fraud awareness training to employees is an essential initiative that universities should implement in order to prevent fraud. According to KPMG (2006:13),

training should be provided continuously to employees in order to make them aware of fraud risks as this will also assist in inculcating a culture of high integrity and compliance within the organisation. Training also empowers employees to identify fraud within the university and how to report it to the appropriate authority.

Respondents hold that fraud risks at universities in KwaZulu-Natal are managed in a systematic manner. They suggest that universities should conduct adequate ongoing identification and assessment of significant fraud risks, including root cause analysis and implementation of mitigating internal controls. KPMG (2006:20) suggests that the risk assessment process should identify the control deficiencies in the current state and consider what interventions will be necessary for the desired state. This implies that fraud risk assessments are an essential intervention in ensuring that fraud risks are managed in a systematic manner at universities in KwaZulu-Natal.

Respondents and knowledgeable individuals are in agreement that management designs and implements internal controls in a structured manner. Respondents hold that management should also monitor the internal controls on a continuous basis. The themes emanating from the analysis of open-ended questions that the respondents and knowledgeable individuals were asked, reveal that 'Internal Controls' are essential for preventing fraud at universities in KwaZulu-Natal.

Respondents held the view that internal and external auditors are currently responsible for preventing fraud at universities. The respondents were also of the view that it is essential for universities to have an internal audit department, which is a view that is also shared by the knowledgeable individuals. Respondents and knowledgeable individuals also held that audits are essential to prevent fraud at universities. Although audits ensure good governance at universities in KwaZulu-Natal, it is not the responsibility of internal or external auditors to prevent fraud at universities. According to COSO (2013:39), it is the sole responsibility of management to design, implement and monitor internal controls.

Respondents held that that audit and risk committees are responsible for preventing fraud at universities. In support of this view, respondents were in agreement that universities should have an independent audit and risk committee. A theme that emanates out the analysis of open-ended questions is that universities should have an audit and risk committee. Audit and risk

committees are not responsible for preventing fraud at universities. According to King III (2009:34), audit committees should maintain oversight over internal controls and not design and implement these controls. This implies that management expects the audit and risk committee to prevent fraud, which is the responsibility of management. Universities should be aware of the roles and responsibilities of management and audit committees with regard to preventing fraud.

Respondents expressed the view that there are adequate anti-fraud policies in place at universities to prevent fraud. According to CIMA (2008:44), organisations should address fraud by designing and implementing a fraud policy and response plan. Respondents held that universities should implement policies and procedures in order to prevent fraud. This implies that anti-fraud policies are an essential form of internal control.

Respondents were of the view that incompatible duties are adequately segregated at universities in KwaZulu-Natal as a fraud prevention internal control. The segregation of duties emerged from the analysis of the open-ended questions that were put to the respondents and knowledgeable individuals, as an internal control that should be implemented at universities in order to prevent fraud at universities. According to CIMA (2008:34), management should exercise additional verification and control when it is not possible to segregate incompatible duties.

Respondents held that universities currently conform to universal governance principles. Respondents and knowledgeable agreed that governance at the university should be based on best practice. It is a requirement in terms of Section 41 of the Higher Education Act (Act 101 of 1997), that the council of a university must provide a report on the overall governance of the relevant institution to the Minister. The Minister requires assurance that the university is operating on sound governance principles. King III IODSA (2009:16) provides sound corporate governance principles which universities in KwaZulu-Natal should adopt as part of their fraud prevention strategy.

Respondents and knowledgeable individuals were in agreement that universities should conduct forensic data analysis in order to detect fraud amongst large volumes of data. An analysis of the fraud case files reveals that regular forensic analyses of data were implemented after fraud was detected at the university. According to KPMG (2006:22), control effectiveness

can be evaluated by conducting forensic analysis of data. The forensic analysis of data is also a fraud detection and prevention technique.

8.4.6 Required Prevention Measures

The views of the respondents and knowledgeable individuals are that universities should provide an anonymous whistle-blowing facility which would enable employees and students to report their suspicion of fraud at universities. They also expressed the view that universities should create awareness about existence of the whistle-blowing facility to employees and students. The results of a global survey conducted by the ACFE (2014:19) reveal that a significant percentage (42%) of employee fraud was detected by means of a tip off. This implies that a whistle-blowing facility is essential for the prevention and detection of fraud at universities in KwaZulu-Natal.

Respondents and knowledgeable individuals were in agreement that universities should conduct due diligence when employing people and when contracting with external parties, such as suppliers. According to KPMG (2006:12), conducting due diligence on potential employees, suppliers, clients and other stakeholders is essential to prevent fraud, which should be undertaken at the commencement of an employment or business association process. This implies that universities in KwaZulu-Natal should be vigilant about who it employees and with whom it conducts business. This will contribute to the prevention of fraud at universities.

There is significant agreement between the respondents and knowledgeable individuals that universities should conduct surprise fraud audits. According to the ACFE (2014:31), surprise audits are an essential anti-fraud internal control. This implies that universities should conduct frequent surprise anti-fraud audits as part of the strategy to prevent fraud at universities in KwaZulu-Natal.

8.5 SUMMARY

This chapter presented and explained the interpretation of the results and findings of this research. The results and findings emanated from an analysis of data that was collated from respondents to the survey questionnaire, face-to-face interviews that were conducted with knowledgeable individuals, fraud case files and the literature search. Firstly, the results and findings showed conclusively what the causes of employee fraud were. Secondly, they showed

what the nature of employee fraud was. Thirdly, they revealed what measures have been implemented by universities in KwaZulu-Natal to prevent fraud. Lastly, they indicated what fraud prevention measures should be implemented by universities in order to prevent fraud.

Universities in KwaZulu-Natal are not immune to employee fraud. They are victims of employee fraud which has resulted in financial loss to universities due to the fraud. There are employees who are dishonest and betray the trust of their superiors by committing fraud against universities. Certain internal controls are designed to prevent fraud but these are of no effect if they are deficient, or employees circumvent them or do not comply with them. The over-riding of internal controls by management pose a serious threat to good governance at universities, which should be taken into consideration when designing and implementing a fraud prevention strategy. This research has found various best practice governance methods that could be used by universities in KwaZulu-Natal in order to holistically prevent employee fraud. The following chapter expounds on the results and findings of this research. It elaborates on model theories and proposes a conceptual model as a key point of departure for a set of recommendations in the last chapter designed to address employee fraud and prevention strategies at universities in KwaZulu-Natal.

CHAPTER NINE

MODEL THEORIES AND PROPOSAL OF CONCEPTUAL MODEL

9.1 INTRODUCTION

This chapter provides an explanation of relevant model theories that have been or could have been used to facilitate comprehension of a theoretical illustration of the successful management of employee fraud at universities. Hanekom (1987:45) holds that public policy making is simplified by the use of models to explain problems. He further explains that a model should consist of five phases, “goal identification, authorisation, public statement of intent, implementation and evaluation”. According to Cloete and Wissink (2000:29), models are used to answer questions of “What happened? Why? What will happen next? How can future processes be influenced and which are viable interventions?”. These are questions that are founded on a particular context and assumption. This chapter relates to model theories in general and proposes a conceptual model particularly for preventing employee fraud at universities in KwaZulu-Natal.

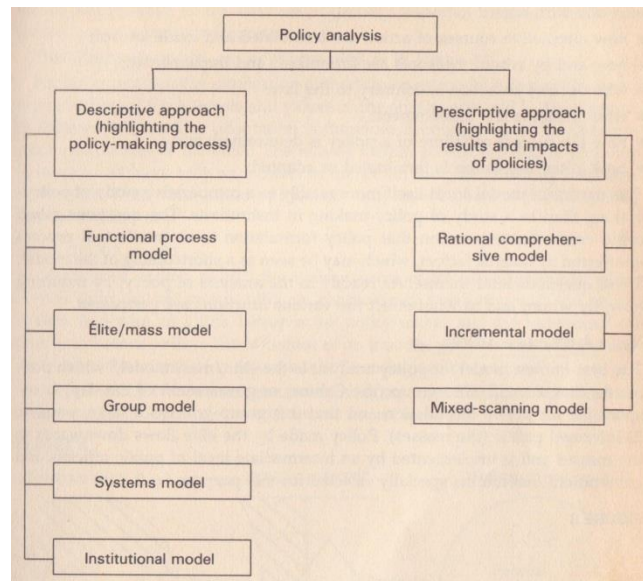
A conceptual model is proposed because this study has found that a holistic approach is required for the prevention of fraud at universities. The proposed conceptual model could be utilised by universities in KwaZulu-Natal, in particular, and universities in general, as a framework to prevent employee fraud.

9.2 GENERAL MODEL THEORY

According to Hanekom (1987:75), models are used to obtain an understanding of the theoretical and practical aspects of policy analysis. He explains that there are two types of methods used to analyse policy, namely, the functional and social efficiency methods. The functional efficiency method is also referred to as the descriptive approach because it describes the method used for problem resolution. The social efficiency method is also referred to as the prescriptive approach because it prescribes the conduct of people. Hanekom (1987:76) postulates that a descriptive approach is useful to analyse the process that is followed for the creation of policy. A prescriptive approach is useful to analyse the outcomes of policy implementation. The particular descriptive and prescriptive approaches were chosen and are explained below because they provide an understanding of systems models in general and

provide a context for the proposed conceptual model in this study. Figure 9.1 below depicts both the descriptive and prescriptive approaches:

Figure 9.1: Descriptive and Prescriptive approaches



Source: Hanekom (1987:77)

In the following paragraphs of this chapter, a number of different models that are related to the prescriptive approach are explained, followed by the descriptive approach models.

9.3 PRESCRIPTIVE MODELS

Hanekom (1987:82) avers that the prescriptive approach is intended to analyse the efficiency of the policy either post-implementation or as a combination of pre-implementation and post-implementation (output and impact). According to Hanekom (1987:82), this approach originated as a method to improve how decisions were made, but the approach could also be used to identify limitations in the policy. The prescriptive approach focuses on the impact of policies and the results thereof. Cloete and Wissink (2000:31) identify four types of prescriptive approaches:

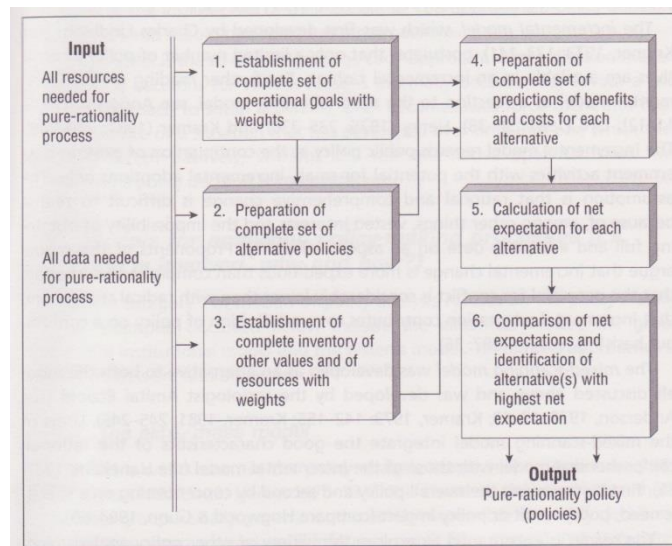
- rational-comprehensive model;
- incremental model;
- mixed-scanning model, and
- garbage can approach.

These four prescriptive approaches are explained in the paragraphs below.

9.3.1 Rational-comprehensive Model

The rational-comprehensive model, according to Dye (1987:31), is intended to provide utmost social gain. According to Cloete and Wissink (2000:32), this model considers the needs, and the importance thereof, to society. This model also explores potential alternative frameworks and their consequences. Hanekom (1987:82) holds that a rational-comprehensive model provides for the policy-maker to have a wide variety of alternatives from which to select. A rational model is depicted in Figure 9.2 below:

Figure 9.2: Rational Model

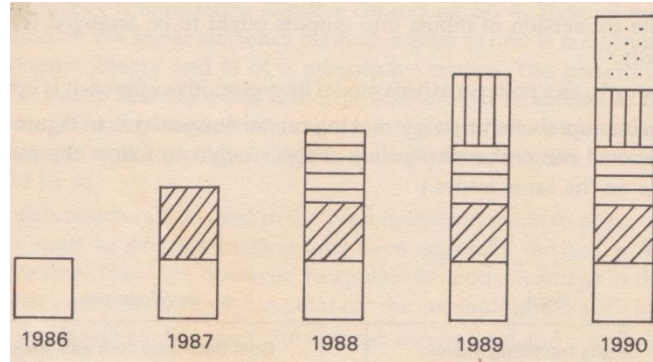


Source: Dye (1987:27)

9.3.2 Incremental Model

Cloete and Wissink (2000:32) hold that an incremental model is based on the assumption that government activities are an extension of public policy. According to Cloete and Wissink (2000:32) and Hanekom (1987:84), government activities, which are being executed in line with existing policy, may only require minor incremental changes in terms of this model. For Cloete and Wissink (2000:32), the advocates of this model find that change in the form of increments can be more rapidly implemented than change that is based on a comprehensive model. It is also suggested that the potential for resistance to change is reduced when an incremental model is used on a continuous basis. Figure 9.3 below shows an incremental model:

Figure 9.3: Incremental Model

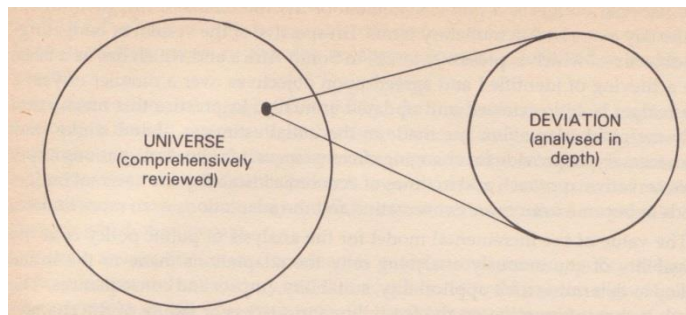


Source: Hanekom (1987:84)

9.3.3 Mixed-scanning Model

According to Cloete and Wissink (2000:32) and Hanekom (1987:85), the mixed-scanning model is regarded as an alternative to the rational-comprehensive and incremental models. The mixed-scanning model involves a selection of best aspects from the other two models mentioned and incorporates them into one. The mixed-scanning model is depicted in Figure 9.4 below:

Figure 9.4: Mixed-scanning Model



Source: Hanekom (1987:86)

9.3.4 Garbage Can Approach

Cloete and Wissink (2000:33) refer to the garbage can model which is used when decisions are made, as a reaction to an event or crisis. This may also be referred to as a “knee-jerk” response. When such a model is used, it is due to inaction by individuals who are tasked to make decisions. Cloete and Wissink (2000:32) aver that these policy-makers have a laidback approach to societal issues and only react when under pressure to do so. The garbage can approach is reactive in nature and activated in response to unfavourable circumstances.

9.4 DESCRIPTIVE MODELS

According to Hanekom (1987:77), descriptive models relate to the process of policy-making, where information relevant to policy is analysed first before policy is developed. Descriptive models are used to describe the methods that are used in problem solving. Such methods are thereafter used to analyse information that is relevant for policy-making. Hanekom (1987:78) finds that there are five types of descriptive model, the functional process, elite/mass, group, institutional and systems models. In addition, Cloete and Wissink (2000:37) also describe the social interaction model, policy network and communities model, as well as the chaos, complexity and quantum models for policy analysis. These models are explained in the sections that follow.

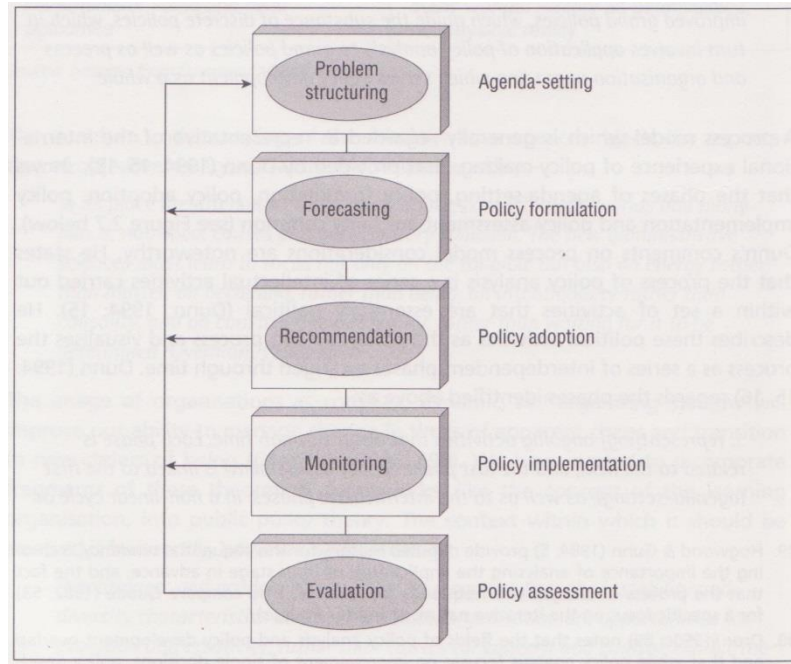
9.4.1 Functional Process Model

The functional process model, according to Hanekom (1987:78), relates mainly to the activities that are carried out during the policy-making process by focusing on the “how” and “who” attributes. He holds that such a model is suitable for conducting a comparative study, rather than a study of policy-making. According to Hanekom and Thornhill (1986:89), the functional process model facilitates the search for answers to the following aspects:

- Formulation and communication of substitute recommendations;
- Allocation of responsibility and guidance for the formulation and application of measures (how and who);
- Allocating responsibility for deciding when action is illegal (who);
- Enforcing the law (who);
- Determining success or failure of a policy (how), and
- Adapting or terminating legislation (how).

Cloete and Wissink (2000:45) observe that the process model is generally used internationally for policy-making. Dunn (1994:15-18), as quoted by Cloete and Wissink (2000:45), holds that the process for the analysis of policy is a combination of intellectual and political activities based on Figure 9.5 below:

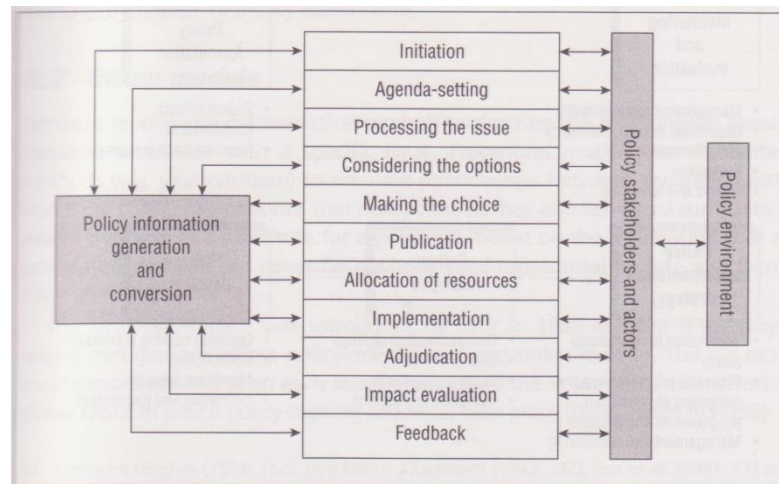
Figure 9.5: Policy-making Model



Source: Dunn (1994:17)

Cloete and Wissink (2000:46) proffer that the stage model is an alternative approach in policy-making whereby the process is segregated into descriptive stages linked to the activities that result in the outputs of policy implementation. According to Cloete and Wissink (2000:47), the stage model emphasises the need to consider the activities that are undertaken during the process of policy-making. The stage model, they postulate, specifically provides for the allocation of resources during the implementation phase of the policy. The stage model is depicted in Figure 9.6:

Figure 9.6: Stage Model

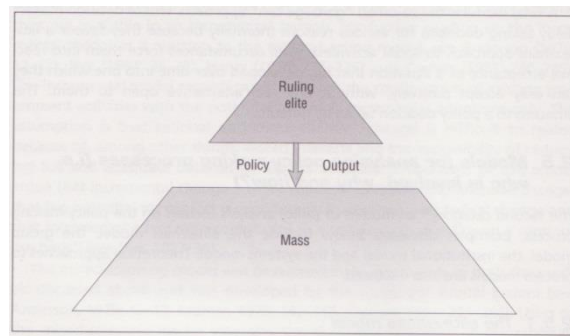


Source: Fox *et al.* (1991:33)

9.4.2 Elite/Mass Model

The elite/mass model, according to Hanekom (1987:78), is a popular model for the analysis of policy. This model is premised on the assumption that the government is responsible for formulating policy for the masses (public) that are inadequately informed. It is suggested that the policy is implemented by public servants and relevant government entities on the masses. Hanekom (1987:79) holds that the assumption in this model is that the elite are in agreement with the policy and continue with implementing it despite what the masses want. De Coning and Cloete (2000:34) hold the view that the elite/mass model ensures that the elite are in power because they know what they are doing and that the policy is based on consensus among them. Figure 9.7 below shows the elite/mass model:

Figure 9.7: Elite/mass Model

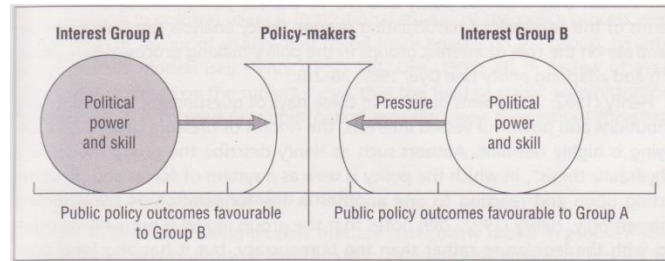


Source: Henry (1992:289)

9.4.3 Group Model

The group model relates directly to the involvement and participation of interest groups, according to Hanekom (1987:79), in order to influence policy-making. The extent of success that a group achieves in this regard is linked to the influence it has on policy-makers. In certain instances, some interest groups may have more of an influence on policy-making than others. Hanekom (1987:80) postulates that the group model is suitable for the initiation and/or adaptation of policy. According to Cloete and Wissink (2000:35), interest groups are vehicles for changing policy due to the pressure they bear and the consultation they have with policy-makers, which are based on subjective reasons such as the interest and preference of the specific group/s. Figure 9.8 illustrates the group model:

Figure 9.8: Group Model

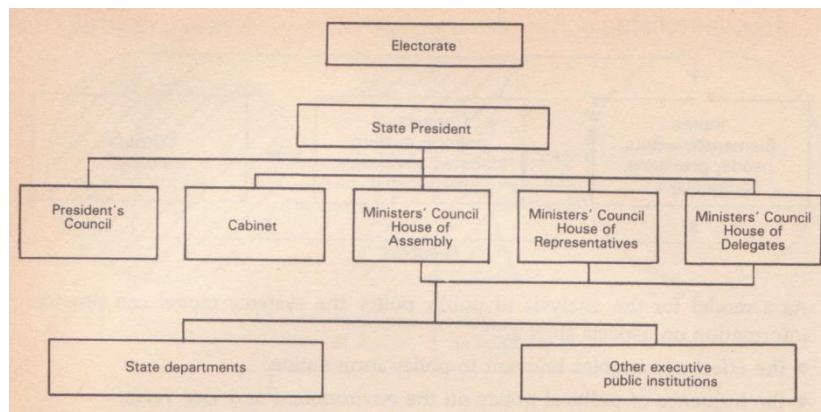


Source: Henry (1992:289)

9.4.4 Institutional Model

According to Hanekom (1987:81), the institutional model is based on the premise that the creation and implementation of public policy is the responsibility of public institutions. He avers that the structure of public institutions is interlinked with policy and should therefore be considered simultaneously. De Coning and Cloete (2000:26) are of the view that the institutional model promotes a separation of power between institutions, for example, the judiciary, the legislature and the executive. The institutional model is depicted in Figure 9.9 below:

Figure 9.9: Institutional Model

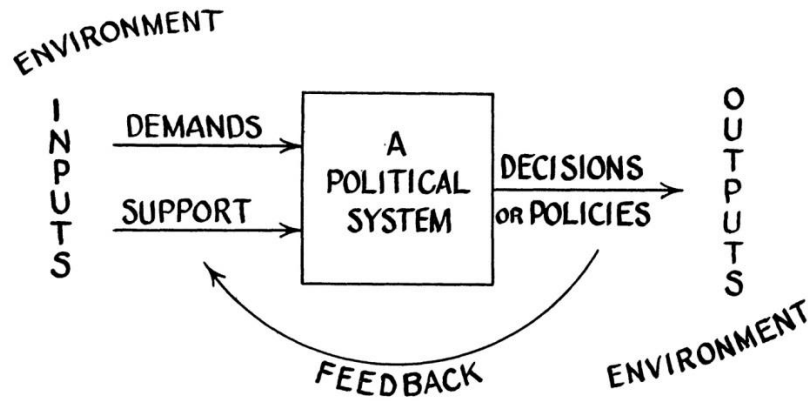


Source: Hanekom (1987:82)

9.4.5 Systems Model

Easton's (1957:384) model for political systems comprises different types of inputs which are processed in a system and generated into various outputs. He holds that these outputs bear consequences for both the system as well as the environment in which the system operates. This simple input and output political system model is depicted in Figure 9.10 below, showing the relationship the system has within an environment:

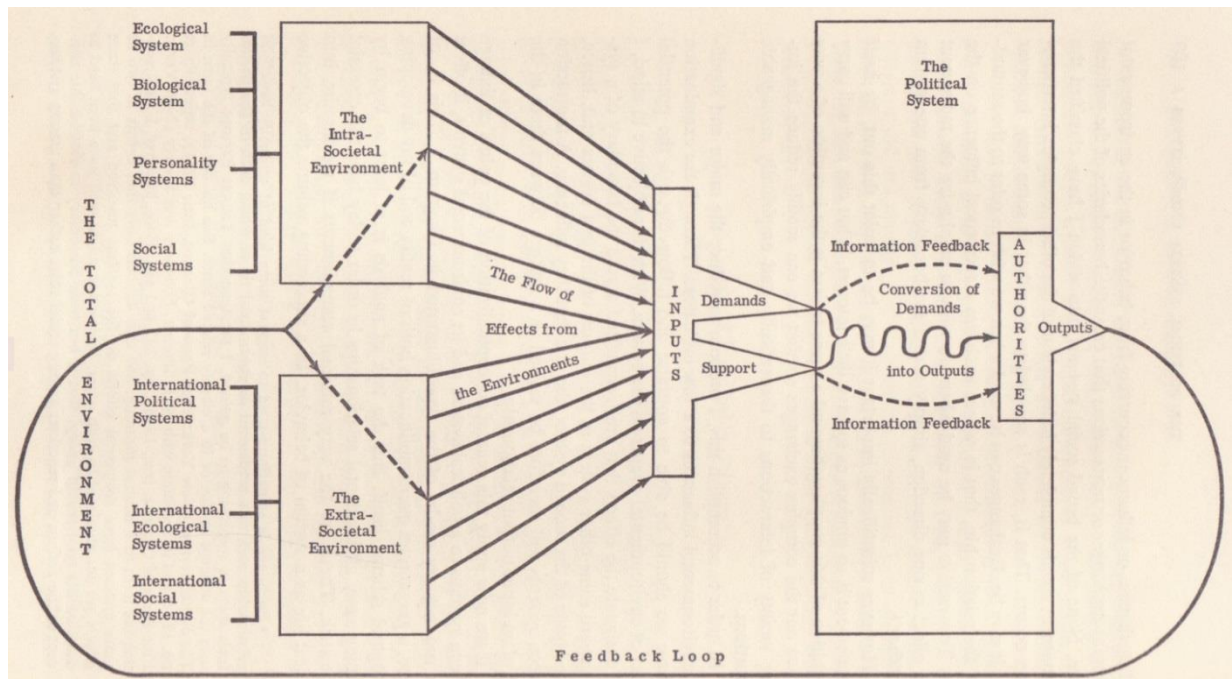
Figure 9.10: Political system



Source: Easton (1957:384)

According to Easton (1965:109), there is a link between political systems and environmental systems. The effect of environment on input impacts the political system, which in turn makes an impact on output. The dynamic response model depicted in Figure 9.11 below reflects a framework for a political system which can be used for analysis:

Figure 9.11: Dynamic Response Model of a political system



Source: Easton (1965:110)

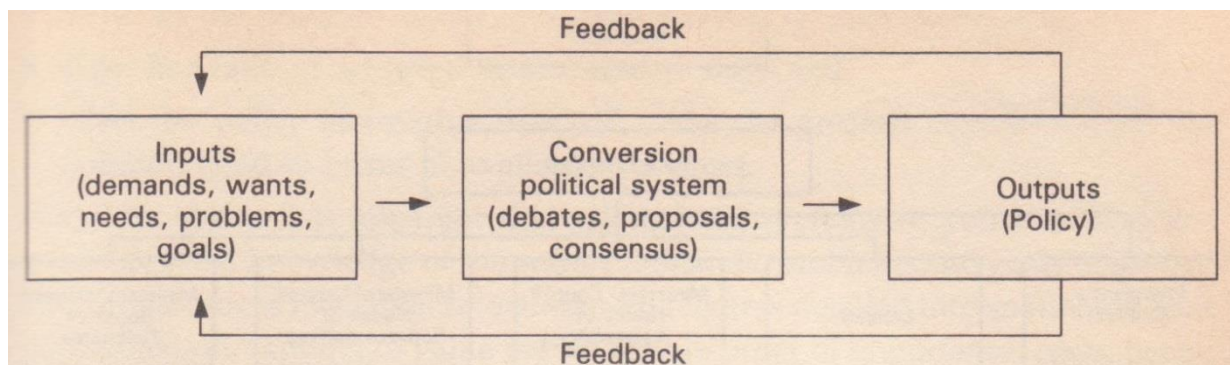
According to Hanekom (1987:80), public policy is determined as a response to the political system to various expectations and requirements of people and particular groups. Support for specific policies is provided to the policy-maker from various sources and is regarded as inputs

to the political system. Hanekom (1987:80) avers that subsequent to debates, proposals and amendments, an agreement is reached about the outputs (policy), which are thereafter implemented. After implementation of the policy, the policy-maker receives feedback about the impact, results and consequences of the policy. The policy-maker makes a decision about further amendments or adaptation that may be necessary. Hanekom (1987:81) postulates that the systems model is also useful when analysing public policy as it provides information on:

- Impact of variables on policy during the design phase;
- Political policy influence on the environments;
- Conversion of demands into policy;
- Feedback process, and
- Extent to which policy is adapted (or new policies are created), based on feedback.

Figure 9:12 illustrates a simplified version of the systems model below:

Figure 9.12: Systems Model



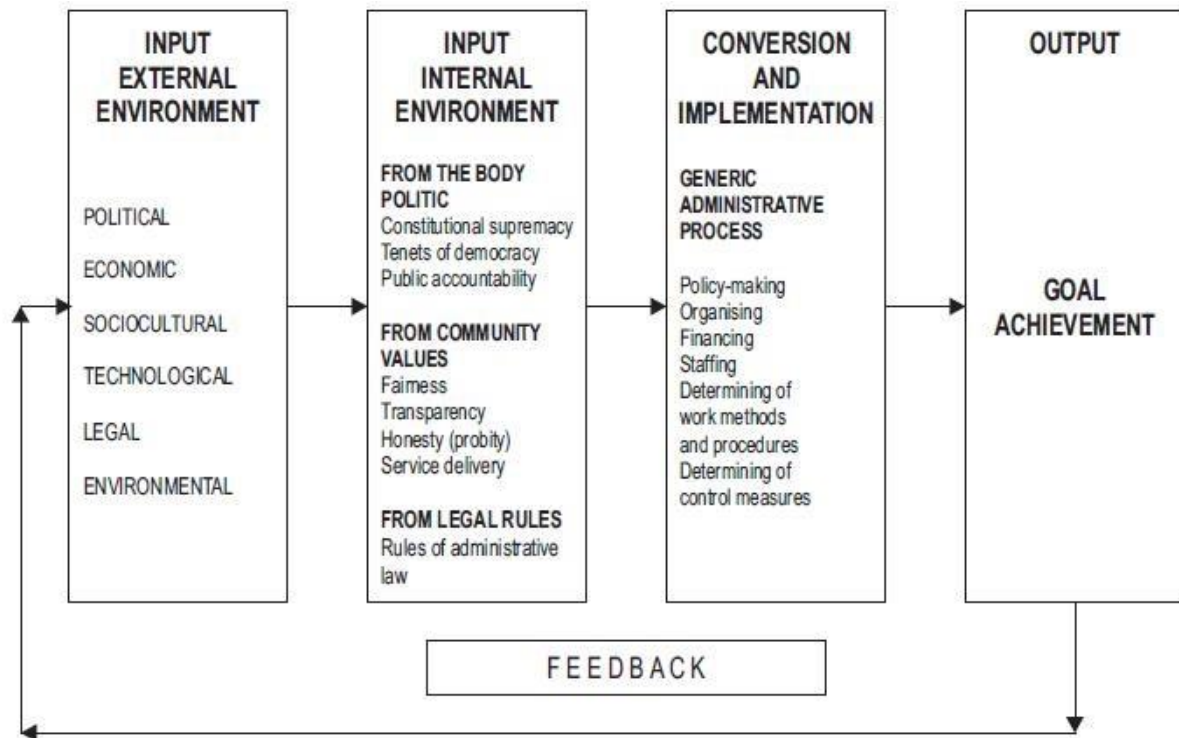
Source: (1987:81)

According to Easton's (1979:29) input-output transformational systems model, a political system is made up of varying external and internal environments. Both these environments are considered and processed through a conversion mechanism. The outputs then lead to a feedback mechanism which provides information back to the external environment about the achievement or otherwise of the set goal. According to Easton (1979:29), where the goals are achieved and the environment is functional, the process can begin afresh whereby the input-output transformational systems model can proceed in a continuous cycle.

For Bayat and Ferreira (2008:79), organisations face internal and external environments which could be hostile and may negatively affect the survival of the organisation. Hence organisations should be prepared for such hostility and set goals appropriately. An adequate

response would be to identify weaknesses and opportunities to convert the hostile environment to the benefit of the organisation and the environment. Bayat and Ferreira (2008:79) hold that a SWOT analysis (analysis of strengths, weaknesses, opportunities and threats) is conducted using a management process as a conversion mechanism to achieve the desired outcome. Figure 9.13 below illustrates an adapted version of Easton's input/output transformational systems model:

Figure 9.13: Systems Model for public management



Source: Easton (1979:29), adapted by Ferreira (1996:81)

According to Easton (1979:29), a dysfunctional external environment contains a need that has to be addressed. The process then flows through the internal environment which is dynamic, and which consists of varying value systems, ethical culture, other foundations and guidelines which act as a filtration process in order to establish and maintain standards of the current body politic, extant community values and legal compliance. The next phase of the process flow is the conversion mechanism, which is the administrative/management process of transforming the demands, problems and needs (inputs) into achieved goals (outputs). This phase comprises a variety of functions and options that are available to enable the organisation to satisfy the expectations of the external and/or internal environment.

According to Wissink (in Fox *et al.*, 1991:32), the systems model is valuable, *inter alia*, due to the framework that it provides, *vis-à-vis*, the links between the needs/demands/inputs, political system and the results/outcomes/outputs in order to render the system functional as well as recurrent. Cloete and Wissink (2000:39) equate the systems model to a “sausage machine” because of the structured application to the process of policy-making. Wissink (in Fox *et al.*, 1991:32) postulate that the model is silent about how the inputs are transformed into outputs and this aspect is regarded as the “black box” of the systems model process. The systems model fails to address the power relationships in the decision-making process, nor does it address the impact of political change on policy-making. According to Wissink (in Fox *et al.*, 1991:32), the systems model is premised on the presumption that the policy process is “logical and orderly”, whereas policy-making is impacted by varying aspects and activities.

9.5 SHORTCOMINGS OF A SYSTEMS MODEL

The views of Erasmus in Bayat and Meyer (1994:83-101) on the adoption of a systems approach as an absolute dogma deserve mentioning here. Erasmus in Bayat and Meyer (1994:84) holds that the systems approach only has real value when viewed in a less reductionist and ideologically predetermined manner.

According to general systems theory, the typifying characteristic of the relationship between elements of systems is their propensity to maintain or restore a condition of equilibrium among all the elements. This characteristic, according to Erasmus in Bayat and Meyer (1994:88), may contribute to a distorted and possibly iniquitous view of the world.

The causal linearity of a process comprising inputs, throughputs, outputs and feedback in dynamic interaction with a discernible environment fits in with the way the empirical world appears to function. In this manner, the systems theory brings complex processes within the cognitive reach of researcher and practitioners. It does so by reducing those processes to a single, predictable, causal unilinear process. Given the understanding that the system is assumed to exist, and because it is assumed to have an inherent inclination for equilibrium, systems theory enables the system to be readily understood. If one of the elements of the system changes, it is assumed that all the other elements will respond in such a manner that equilibrium within the system will be maintained. However, Erasmus, in Bayat and Meyer (1994:90), questions the validity of the view that any society consists of several inter-related

subsystems, and that such subsystems interact within an indeterminate cycle of mutual reciprocity that promotes and enables harmony and overall stability within the system. He substantiates this view by referring to Minzberg (1983:177), who states that each subsystem pursues its own dynamic ends, to the exclusion of other subsystems. As a result, subsystems often compete with overall system goals for primacy.

Evidence of the above phenomenon within a system is furnished by Hult and Walcott (1990:2), with an explanation of the factors that led to the Challenger space shuttle accident on 28 January 1986. One of the main reasons put forward for the occurrence of the disaster was extreme competition among the various sub-divisions of the National Aeronautics and Space Administration (NASA) organisational structure charged with the shuttle program. These were the three field centres, the Marshall Space Flight Center in Huntsville, Alabama, the Johnson Space Center near Houston, and the Kennedy Space Center in Florida. Especially as the NASA budget grew leaner in the 1980s, these three organisational structures competed for resources and responsibilities and resisted sharing information or dividing and co-ordinating tasks. Ultimately, it was found that this lack of effective communication and lack of sharing of resources as well as a propensity of the various management structures within the three organisational sub-divisions to "... contain potentially serious problems and to attempt to resolve them internally rather than communicate them forward ... ", were the main causes of the accident.

The above case study reiterates Minzberg's (1983:177) view that each subsystem within a system pursues its own dynamic ends, to the exclusion of other subsystems. Erasmus in Bayat and Meyer (1994:91-92) nevertheless accede that simply acknowledging the existence of assumptions and/or assertions that the systems theory is fallacious should not result in the whole systems approach being rejected. There can be little doubt that systems do exist, and that their elements are integrally related. Systems *per se* should, however, be viewed with a fundamental conceptualisation and empirically-driven consideration of the nature, limits and usefulness of systems theory and its contributing concepts.

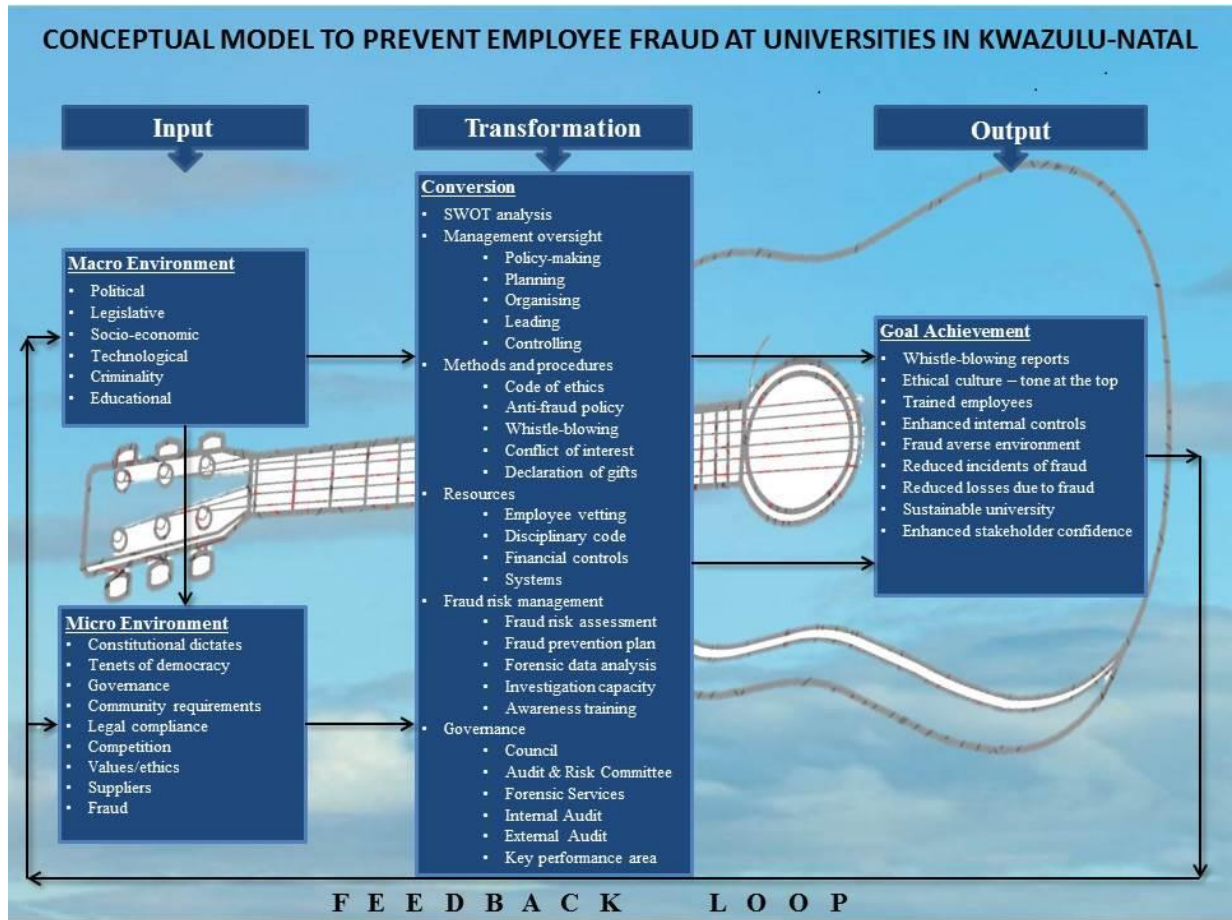
Bearing in mind the abovementioned inherent shortcomings of utilising a systems approach to explain phenomena, it is nevertheless proposed that the systems approach be used for the purpose of analysing phenomena relevant to this study. There could be numerous other approaches that could be used, but the researcher has selected this one for this study. This

proposal is made considering the particular circumstances of the South African situation, where the adoption of an easily-understood approach that may yield relatively rapid results in the short term, is regarded as suitable to facilitate understanding of complex social sciences.

9.6 PROPOSED CONCEPTUAL MODEL

In developing a conceptual model for preventing employee fraud at universities in KwaZulu-Natal, the input/output transformational systems model of Easton (1979:29) formed the basis for its creation. The proposed conceptual model is intended to provide a simplistic overview for the management of the complex subject of preventing employee fraud at universities in KwaZulu-Natal in a holistic manner. The proposed model should take into consideration the complexity of the influence that an environment has on a political system and should therefore be flexible and adaptable to the changing environment. Wissink (in Fox *et al.*, 1991:32) avers that the policy process is not “logical and orderly” because it is influenced by other factors. The proposed model is intended to convert dysfunctionality with respect to fraud within universities in KwaZulu-Natal to enable employee fraud to be prevented. Due to the dynamic nature of the topic of this study, the proposed conceptual model is flexible and adaptable to the changing environments that affect each university. The proposed conceptual model for fraud prevention at universities in KwaZulu-Natal is depicted in Figure 9.14 below:

Figure 9.14: Adapted from input/output transformational systems model, by Easton (1979:29)



Proposed conceptual model for fraud prevention at universities in KwaZulu-Natal

9.6.1 Macro Environment

According to Ferreira (1996:403), there are different types of environment which can affect an organisation. The macro (external) environment forms part of the “input” phase of the systems model. Easton (1965:113) holds that environmental input is an aspect which impacts a system from the outside of that system. The macro environment, that impact on organisations, should be considered as dysfunctional within the context of the systems model. In this proposed conceptual model, universities in KwaZulu-Natal should contemplate the following macro-environmental factors:

- Political

The political landscape has an impact on the creation of policies as government responds to the demands and needs of the communities it serves. In this study, it was found that government has designed and implemented certain policies and plans intended to satisfy the political requirements of the people of South Africa.

- **Legislative**
The legislative environment consists of common law and statutory law. This study has delved into the specific laws that have been promulgated to combat fraud and corruption within the country. Legislation, such as the Higher Education Act 101 of 1997, specifically relates to universities and other institutions of higher education and stipulates how they should operate.
- **Socio/economic**
The societal demands and needs coupled with the economic environment directly impact the delivery of services to communities. These two factors influence the formulation of policy. The socio/economic impact should be considered by universities when designing and implementing policy to enable the achievement of goals that satisfy the needs and demands of the communities which are affected.
- **Technological**
Rapid technological advancement continues to influence and impact policy formulation. Due to the continual changes in the technological environment, government should regularly review policies and align these to the rapid evolution of technology. This study has found that fraudsters continuously adapt their *modi operandi* to evade detection by the authorities. Management should remain cognisant and vigilant about the impact of technology on policies.
- **Criminality**
Criminality has a direct impact on communities because it is linked to socio/economic factors such as unemployment and poverty. Fraud is an act of criminality as it is listed as an unlawful act in terms of the Criminal Procedure Act 51 of 1977. Criminality affects both the public and private sectors. Government should consider the impact of criminality on service delivery during policy formulation.
- **Educational**
The Bill of Rights enshrined in the Constitution of the Republic of South Africa Act 108 of 1996 dictates that every citizen of South Africa has a right to further education. Government is therefore expected to fulfil this obligation through policy formulation and resource allocation. Providing higher education to all citizens remains a challenge due to the limited availability of financial and infrastructural resources.

9.6.2 Micro Environment

The micro (internal) environment also has an impact on an organisation. The micro environment forms part of the “input” phase of the systems model. The aspects that universities should consider in this micro environment phase are the following:

- **Constitutional dictates**

The Constitution of the Republic of South Africa Act 108 of 1996 is the supreme law of the country. All other subordinate laws should be aligned to the constitutional dictates. Policies that are not congruent with the constitutional dictates should not be designed and/or implemented.
- **Tenets of democracy**

The current democratic body politic in South Africa dictates that all citizens are expected to abide by the tenets of democracy. Policies should be formulated in consultation with people or interested parties who may be impacted. Government is accountable to the people who have elected them into power. The rule of law principle should be adhered to, and any changes that are required to be made to policies should follow a democratic path of consultation with the affected communities.
- **Governance principles**

Organisation should abide by the governance principles of fairness, accountability, responsibility and transparency. These four principles have an impact on the achievement of goals and should be considered during the policy formulation phase. Abiding by these governance principles is essential to combat fraud at universities. Sound governance is the cornerstone to service delivery.
- **Community requirements**

The requirements of the community are the foundation of policy formulation. It is essential to understand what the client (community) needs or demands. The community at the university comprises mainly parents, students and employees. Any political system should consider what the community requires to enable goal achievement that is sustainable.
- **Legal compliance**

Universities are affected by various legal prescripts. They must ensure compliance with administrative law requirements such as:

 - *Intra vires*, meaning within legal authority;

- *Ultra vires*, meaning beyond legal authority;
- *Bona fide*, meaning done in good faith;
- *Mala fide*, meaning done in bad faith, and
- *Audi alteram partem*, meaning hear the other side.

Compliance with legislation is not only a legal obligation but also a moral one. Universities should formulate policies and procedures that ensure and promote legal compliance. The risk of non-compliance with legislation should be considered when designing and implementing policy.

- Competition

The impact of competition among universities should be considered when formulating policy. Universities need to attract students to ensure that they remain relevant and sustainable. Universities do not have a captive market because students have a choice of which universities they want to attend. The quality of teaching, learning and research should be of a superior standard to enable the university to be competitive. This variable should also take into account the substantial number of applicants that are rejected at all universities each year. The reality is that universities are inundated with applications and are unable to accommodate all applicants.

- Ethics

Ethics is the cornerstone of sound governance. Universities should consider the risk of unethical conduct by staff and students within the systems model approach. A poor ethical culture sends a message to the community that the university has a poor governance environment. A sound ethical culture attracts donors and students to a university.

- Fraud

The results of this study have shown that universities are exposed to the risk of fraud. Fraud has an impact on the environment of a systems model. The debilitating effects of fraud on an organisation and its stakeholders should be considered when formulating policies. Fraud impedes the delivery of service to the community.

- Suppliers

Suppliers are essential in the service delivery chain. The impact that suppliers have on a systems model can be significant. Unscrupulous suppliers who commit fraud,

either in collusion with university employees or on their own, have a detrimental effect on the ability of the university to deliver a superior service to its stakeholders. The process of policy formulation should thus consider the role and impact of suppliers on service delivery.

9.6.3 Transformation Mechanism

The next phase in the systems model is the transformation (conversion) mechanism. According to Hanekom (1987:80), the conversion mechanism forms part of the output phase of the systems model. In this phase, the intervention entails addressing the demands, needs and problems identified in the environments by designing and implementing mechanisms to convert the situation from dysfunctionality to functionality. The dysfunctions are embedded in the external (macro) environments and, for effective and efficient goal achievement, are converted to functionality by the conversion mechanism (also known as the “black box”). The transformation mechanism in the proposed conceptual model involves the following:

- **SWOT analysis**
It is essential for Management to conduct an analysis of the strengths, weaknesses, opportunities and threats (SWOT) by which it is confronted. A SWOT analysis should form part of the initial step of the transformation mechanism and identify areas of focus. The results of this analysis should guide the designing of interventions by management and lead to the formulation of policies that are intended to satisfy the needs of the stakeholders.
- **Management oversight and policy formulation**
Management oversight is essential during the process of policy-making, planning, organising, leading and controlling. The findings of this study showed that there was a lack of management oversight, resulting in fraud being committed against the universities. In order to achieve the goals set out in the systems model, it is essential for management to maintain sound oversight over operations.
- **Methods and procedures**
It is essential, during the conversion process of the systems model, to design and implement effective policies. This study has found that certain policies contribute towards preventing fraud at universities. There are five policies that are recommended, namely, code of ethics, anti-fraud, whistle-blowing, conflict of

interest and gifts policy. It is not sufficient to design and implement policies without relevant and adequate procedures that need to be followed to ensure compliance with the policies. Management should concurrently design, implement and communicate a set of procedures for each policy to relevant stakeholders, to ensure compliance.

- Resourcing

Providing resources to enable management to give effect to the policy should be an essential consideration during the conversion phase of the systems model. Notwithstanding the costs of resourcing, management should ensure that prospective employees are adequately vetted prior to employment. A disciplinary code should govern the misconduct of employees. When policies and procedures are implemented they require oversight. In this regard, internal financial controls are essential to ensure that the objectives set by management are achieved. Internal controls can be costly, a factor which management should take this into consideration during the policy-making process. In the technological advanced environment in which universities operate, electronic systems are essential for service delivery. Such systems are also costly, another factor of which management should be cognisant.

- Fraud risk management

The management of fraud risk requires a holistic approach given the complexity of the crime. The management of fraud risks at universities should comprise five key components. This study has found that the assessment of fraud risks, designing and implementing a fraud prevention plan, forensic analysis of data, retaining a competent investigation capacity and providing fraud and ethics awareness training are essential to prevent employee fraud. A comprehensive fraud risk management strategy should include these five key components.

- Governance

This study has found that sound governance at universities should be supported by certain essential structures. Oversight bodies such as a Council and Audit and Risk committees are essential in ensuring that there is sound governance at the university. The Higher Education Act 101 of 1997 stipulates that universities should be governed by a Council, which should form any other committees that it deems necessary. The Council and its committees are assisted by functions such as

forensic services, internal audit and external audit. The roles of these entities are to provide assurance to Council and its committees about the governance of the university. The study has also found that governance should form part of a key performance area for management. The measurement of the performance of management should include assessing governance.

9.6.4 Goal Achievement

The goal achievement phase of the conceptual model is also regarded as the “output” phase. In this phase, the results of the interventions that were embarked on are reviewed to ensure that the goals that were envisaged have been achieved. According to Easton (1965:127), outputs are results that either address the need of the environment, or are adapted in order to satisfy the need. In order to achieve, maintain and enhance the prevention of employee fraud at universities in KwaZulu-Natal, the following goals should be achieved to satisfy this need:

- Reports are received from the whistle-blowing facility;
- Sound ethical culture;
- Employees are trained and aware of fraud risks;
- Enhanced internal control environment;
- Fraud averse environment;
- Reduced incidents of employee fraud;
- Reduced value of losses due to employee fraud;
- University is sustainable, and
- Enhanced stakeholder confidence.

9.6.5 Feedback

The feedback phase forms a loop within the conceptual model. Easton (1965:128) avers that feedback is necessary for a system to respond appropriately about the existing conditions, the support being provided and the effect of the outputs. The feedback mechanism is a method to evaluate the results and inform the internal and external environments about the success or failure of the envisaged goal. Where the goals have been achieved, the continuous process will identify new demands, needs or problem which will require resolution. According to Cloete and Wissink (2000:39), the systems model approach is cyclical. It will commence afresh once new demands, needs or problems are identified. The feedback phase, Easton (1965:129) states,

is intended to equip the relevant authorities when assessing the system to make adjustments, corrections or modifications to their existing decisions.

9.6.6 Guitar Analogy to a Systems Model

The guitar is analogous to an input/output transformational systems model. A guitar was chosen to depict a systems model in this study because it is a universal musical instrument. Guitars around the world are tuned in the exactly the same way, which enable a guitarist from anywhere in the world to play a guitar that is universally in tune. In the sections below, the analogy of a guitar to a systems model is explained. The input phase in the guitar involves tuning each specific string to a predetermined note. The transformation (conversion) phase takes place on the fret board of the guitar where the notes are played. The output phase is the sound that resonates from the belly of the guitar. The feedback phase would include the audience that receives the musical notes as sound.

9.6.6.1 Input

A guitar has to be well tuned to ensure that whatever musical notes a guitarist plays will satisfy the audience. Each string on a guitar is individually tuned to a predetermined note. Tuning each string in this manner enables the guitar to be in tune and ready for playing musical notes or chords. Such a process can be likened to a systems model which is impacted by various demands, needs and requirements from internal and external environments.

9.6.6.2 Transformation

In order to create musical sounds, the guitarist uses his/her fingers on the strings along the fret board to do so. The music could be either played note-by-note or in chords. Chords are a combination of strings that are pressed down by the guitarist using his fingers in a particular position on the fret board and then the strings are strummed together to create a musical note. This phase is comparable to the interventions that are implemented by policymakers (Council) and university employees in converting the inputs to outputs.

9.6.6.3 Output

The output phase embodies the release of sound from the belly of the guitar in the form of musical notes (output). The output is the result that is derived from tuning the strings (input) as

well as playing the musical notes or chords (transformation) on the guitar. The audience will either approve or disapprove of the music. The output phase is analogous to goal achievement where the environment may, for example, be satisfied that their needs have been met.

9.6.6.4 Feedback

As mentioned, the audience listens to the music from the guitar and either approves or disapproves of it. If the music is approved, then new melodies are played. Should the melodies, or the manner in which they were played, be disapproved of, it would warrant a rehearsal or changes to the process, such as re-tuning the guitar and/or playing different melodies that the audience prefers. The analogy of a guitar, when referring to a systems model, serves two purposes. Firstly, it depicts the input, transformation, output and feedback phases of a systems model. Secondly, it depicts an essential factor of “ethical tone” which is a vital foundation for a sound organisational culture. The Council of a university is regarded as a policy-maker for the university. Councils are tasked with setting a sound ethical tone at universities in KwaZulu-Natal, like a well-tuned guitar. This conceptual model serves to emphasise the “tone at the top” advocated by King III (2009:11).

9.7 SUMMARY

This chapter has explained the various models and theories that are available for use throughout the world. For purposes of this study, an adaptation of the input/output transformational systems model was designed and presented in this chapter. The conceptual model provides universities in KwaZulu-Natal with tools to prevent employee fraud. The results of this study have revealed that employee fraud at universities in KwaZulu-Natal should be addressed in a holistic manner. The implementation of a fraud risk management strategy has to be based on a multi-faceted approach rather than piecemeal. Universities should determine a practical approach when considering implementing this conceptual model.

The next and final chapter provides a set of recommendations as a contribution to the existing body of knowledge, which would be valuable to universities in KwaZulu-Natal, in particular, and universities in general, to prevent employee fraud. Chapter Ten also provides a conclusion to this study.

CHAPTER TEN

RECOMMENDATIONS AND CONCLUDING REMARKS

10.1 INTRODUCTION

This chapter highlights the significant findings emanating out of this study. These findings are related to the following research questions propelling this study:

- What are the causes of employee fraud?
- What is the current nature and extent of fraud committed by employees?
- What fraud-prevention measures are currently in place to manage fraud at universities in general and those in KwaZulu-Natal in particular?
- What additional fraud prevention measures could be recommended to universities for implementation at various levels?

In line with the objectives of this study, recommendations are made in this chapter to narrow the gap between the current measures that are in place and additional measures required to prevent employee fraud at universities in general, and universities in KwaZulu-Natal in particular. Based on these findings, it is essential that a holistic approach is adopted to prevent employee fraud at universities in KwaZulu-Natal. The proposed conceptual model explained in Chapter Nine serves to simplify and complement the understanding of the recommendations intended to prevent employee fraud at universities.

10.2 SUMMARY OF FINDINGS OF THE STUDY

A summary of the significant findings of the study are highlighted in this section. These findings are explained under four headings in relation to the research questions.

10.2.1 Findings on Causes of Employee Fraud

This study has found that employee fraud continues to pose a risk to organisations globally and in all sectors of the economy with a concomitant increase in losses. Universities are susceptible to employee fraud because the internal control environment is based on openness, collegiality and academic freedom, which are fertile grounds for fraud because incompatible duties are not adequately segregated; explicit trust is placed on employees and there is a lack of management oversight and monitoring. This study also found that the

prevention of employee fraud requires more than a sound internal control environment. The ethical culture of an organisation also occupies an essential role in the fight against fraud. Just as business processes have evolved, it is essential for fraud prevention techniques and methodologies to keep pace with continuing change in the work environment.

The perpetration of fraud by employees is enabled by a variety of factors that are necessary for it to be committed. These factors are financial pressure, opportunity, rationalisation and capability that a fraudster requires to commit fraud. The study has confirmed that employees commit fraud because of their greed for money. Fraudsters live beyond their means. Greed is regarded as the pressure or motivation to commit fraud. Fraudsters exploit deficient internal controls to commit fraud because this provides them the opportunity necessary to commit fraud without being easily detected. Employees rationalise their unlawful conduct vis-à-vis fraud, by convincing themselves that their wrongdoing is justified.

10.2.2 Findings on the Nature of Employee Fraud

Employees in the management and senior management cadre commit the most number of frauds within organisations. The use of computer technology has exposed organisations to increased risk of fraud. Fraud that involves collusion amongst employees or employees with suppliers is difficult to detect as they circumvent internal controls and conceal the fraudulent act. Trustworthy employees are not a control measure. Apart from the actual funds that are misappropriated, employee fraud affects organisations in various other ways such as legal costs, negative publicity, poor employee morale and costs to institute formal disciplinary procedures. There are two types of fraudsters: the predator fraudster and the accidental fraudster.

Universities have suffered financial losses due to frauds. Fraudsters identified were found to work in a finance or procurement related role. They commit fraud by circumventing or overriding internal controls. The frauds relate to the procurement of goods/services, expense claims, falsification of documents/records, soliciting bribes and conflicts of interest. The value of most incidents of fraud is below R100 000.

10.2.3 Findings on Current Fraud Prevention Measures

Universities rely on current legislation, regulatory frameworks and anti-fraud organisational policies and procedures to prevent fraud. Whistle-blowing mechanisms are essential fraud prevention and detection initiatives. Although whistle-blowing is reactive in nature, that they could be reported also serves as a deterrent to potential fraudsters. Internal controls are essential to prevent fraud but are not the only anti-fraud intervention that is relied on by universities.

This study has revealed that fraud is usually investigated by internal university employees. Management is responsible for designing and implementing internal controls. The study has also found that there is incongruence between the designing and implementing of internal controls due to the circumvention and over-ride of certain internal controls. The deficiency in this process is that management, which is responsible for designing and implementing internal controls, is also involved in violating them to commit fraud. The non-compliance with the internal controls results in objectives not being achieved.

Universities in KwaZulu-Natal have implemented adequate anti-fraud policies. Incompatible duties are adequately segregated. The responsibility for preventing fraud lies with management, internal auditors, external auditors and audit and risk committees. Employees who commit fraud are subjected to disciplinary action, criminal prosecution as well as civil litigation to recover losses. Continuous fraud awareness training is provided to university employees.

10.2.4 Findings on Additional Fraud Prevention Measures

It is essential for the focus of anti-fraud efforts to move from detection to prevention. There are various legislation, models and frameworks that are available which advocate a sound governance environment. Valuable information was collated, *inter alia*, from The Constitution of South Africa Act 108 of 1996; King III; the Batho Pele principles; National Development Plan 2030; the African Charter and other relevant literature related to preventing fraud at universities.

The findings of this study have shown that policies and procedures are essential for preventing fraud. Sound governance requires organisations to have an independent audit

and risk committee. Internal audit departments are also a requirement but should report directly (functionally) to the Audit and Risk Committee in order to retain independence and objectivity. A sound ethical culture is the cornerstone of good governance, which is premised on a code of ethics for all employees. In order to inculcate a sound ethical culture at universities, executive management (leadership) is required to lead by example and regularly communicate a strong ethical culture to employees.

Educating and training employees about fraud and the prevention thereof is also necessary. Red flags indicate the potential presence of fraud, of which employees should be made aware. Anonymous whistle-blowing hotlines are a valuable mechanism which enables employees and students to report suspicions of fraud. These reports should be investigated by competent forensic investigative personnel. Awareness about the existence of the whistle-blowing facility is essential for its success.

A fraud risk management strategy that is developed and implemented should incorporate detection, investigation and prevention methodologies. Management has to play an active role in fraud prevention from an oversight and monitoring perspective. The assessment of fraud risks provides the university with insight into the root causes of fraud to enable it to implement mitigating controls. Internal controls are essential to prevent fraud and should be designed and monitored by management. It is necessary to conduct due diligence when employing people and contracting with third parties. The forensic analysis of data is also valuable especially when dealing with large volumes of data. Surprise fraud audits have been found to be an essential part of fraud prevention. It is essential for sound governance to provide recognition for good service, clean audits and well-run divisions, and should form part of the key performance areas of employees by which their performance is managed and measured. In order for fraud risk management to be sustainable, it is essential that this topic be incorporated into the curriculum of courses offered at universities.

10.3 RECOMMENDATIONS OF THE STUDY

The recommendations outlined below are based on the findings of this study. These recommendations are intended to provide guidance to universities in KwaZulu-Natal on measures that should be implemented to prevent employee fraud. The recommendations

emanating from this study are in line with the objectives outlined in Chapter One and are explained in the sections below.

10.3.1 Trust and Collegiality

Although trust and collegiality are essential in maintaining a sound working environment at universities, these aspects require a degree of circumspection on the part of management. Trust is not an internal control because most employees who commit fraud exploit the trust and collegial relationship that they enjoy with their employer in order to commit fraud. Management should therefore exercise their professional scepticism during their oversight and review of operational activities, and not be blinded by trust and collegiality. The reluctance by management to review and monitor a subordinate's work does not promote collegiality. This reluctance constitutes a breach in the internal control process of monitoring and reviewing compliance with policies and procedures. Raising awareness about this phenomenon should form part of ongoing fraud awareness education at universities. Internal auditors and forensic investigators should remain cognisant of this red flag when conducting an audit or investigation.

10.3.2 Ethics

An ethical culture should constitute the foundation of governance at universities. The Council of the university should approve a policy on ethical conduct. The implementation of the policy must be propelled from executive management who should also lead by example. This is regarded as setting the tone-at-the-top. In order to inculcate an ethical culture at the university, executive management should regularly communicate with employees about the policy on ethics and create awareness about ethical behaviour. The university should establish an Ethics Committee which should be chaired by a member of executive management. The committee should meet regularly to monitor the ethical landscape of the university. Each college or division should have an ethics champion who would ensure that the ethics policy is being regularly communicated and that management is leading by example. Non-compliance with the policy should be dealt with swiftly and decisively to serve as a deterrent to potential violators.

10.3.3 Fraud Committed by Management

The Council of the university should take note of this concerning phenomenon, namely, fraud committed by management. Council should implement focused oversight over the conduct of management at the university. In this regard, Council should task its committees, such as the Audit and Risk Committee as well as the Finance Committee, to improve and enhance their oversight over the performance of management. Management should be dealt with appropriately should they be found to have over-ridden or circumvented internal controls to commit fraud against the university; such measures should include instituting disciplinary, criminal and civil action against them. Those tasked with preventing fraud at the university should focus on creating awareness among all staff about this phenomenon and implement initiatives for misconduct which is reported to executive management or to the vice-chancellor of the university should the fraud be committed by a member of executive management. Internal auditors and forensic investigators should be cognisant of this phenomenon when they scrutinise the internal control environment because unscrupulous members of management could intentionally design and implement weak internal controls with the objective of exploiting the deficiency to commit fraud. Council should inculcate an ethical culture at the university by obliging the university leadership to lead by example and taking stringent action against management who engage in dishonest and/or unethical behaviour.

10.3.4 Red Flags

Red flags serve as warning signs about the potential that employee fraud is or may be, occurring. Universities should make a list of these common red flags and alert employees about them during the fraud awareness education initiative. Although red flags may be found in a particular environment, they should not be regarded as conclusive evidence that fraud is taking place. The red flags depict typical behaviour displayed by fraudsters based on ongoing global research. Management should be circumspect when responding to such red flags, and if they are in doubt as to what they should do, they should refer their suspicions to those tasked with investigating suspected fraudulent behaviour. Internal auditors and forensic investigators should remain cognisant of typical red flags when conducting an audit or investigation.

10.3.5 Types of Fraud Schemes

The common types of fraud schemes that universities should be vigilant about involve the procurement of goods and/or services, expense claim fraud, falsification of documents to commit fraud, theft of assets, soliciting bribes from suppliers/students and fraud involving a conflict of interest.

Management should ensure that the procurement of goods and/or service is carried out in compliance with the procurement policy of the university. The university should have a procurement department which should be responsible for procuring goods and/or services on its behalf.

Management should be vigilant when approving the expense claims of employees. A common fraudulent expense claim practice is to inflate mileage claims, *per diem* allowances or other expenses. In certain instances, employees submit falsified invoices or receipts to support their expense claims. It is recommended that management pre-authorise expenses so that they are not surprised when the expense claim is submitted to them for approval.

It is recommended that management verify the authenticity of documents and ensure that they are aware of the activities that are taking place within their areas of operations. In instances where management is dissatisfied about the expenditure incurred, a telephone conversation or email communication with the supplier would be able to verify pertinent issues of concern that management may have.

The risk of misappropriation (theft) of assets can be reduced by the implementation of an updated asset inventory listing, coupled with asset tagging and regular asset verification exercises. Management should also enhance the physical access system at the university to prevent the theft of assets. This access system could be implemented jointly with the security department at the university.

Management should remain vigilant about employees who solicit bribes from suppliers or students. Excessive expenditure on a particular supplier should serve as a red flag which would require some degree of probing by management to determine the authenticity of transactions.

The university should ensure that a code of conduct is also applicable to suppliers and students and regularly communicated.

Employees commit fraud because of a conflict of interest. The Council of the university should approve an appropriate policy relating to the declaration of interests for all stakeholders. Management should ensure that employees make regular declarations about any conflicts of interest that they have and which may impact the university. There should be a standard item on the agenda of all committee meetings where employees are required to declare any conflicts of interest. Universities must ensure compliance with Sections 27 and 34 of The Higher Education Act 101 of 1997, which requires members of Council and its committees as well as employees of universities respectively, to declare any conflicts of interest. Moreover, these stipulations must be discussed periodically to remind members of what having a conflict of interest means precisely, as often the negative response is made unthinkingly.

10.3.6 Collusion

Management should be alerted to the fact that collusion between employees and other employees or employees and suppliers/students to commit fraud is difficult to detect. It is recommended that internal controls are enhanced when collusion is suspected. Management should enhance its review and oversight over operations to deter employees who may be inclined to collude with others to commit fraud. Regular forensic analysis of large volumes of data will unearth potential fraudulent transactions. Regular fraud awareness education should be provided to employees in order to alert them to be vigilant about the risk of collusion and encourage them to report any suspicion about it to management, or to the whistle-blowing facility provided by the university.

10.3.7 Policies

To effectively address employee fraud, universities should design and implement policies and procedures related to the following:

- Ethics;
- Anti-fraud;
- Whistle-blowing;
- Conflict of interest, and

- Gifts.

In order for stakeholders to comply with these policies and procedures, it is essential for regular and continuous awareness training and education to be provided about these policies among stakeholders.

10.3.8 Internal Controls

Internal controls such as policies and procedures contribute towards preventing fraud. However, universities should remain cognisant of and vigilant about the potential for employees to collude with other employees or external parties to commit fraud by circumventing internal controls. In such instances, the strongest internal controls would not prevent a determined fraudster from perpetrating fraud. Internal controls are also rendered useless when management over-rides the internal controls to perpetrate fraud. Internal controls should be reviewed periodically to ensure that they remain adequate and effective for the purposes for which they were intended. The internal audit department is appropriately skilled to provide assurance to the university about the adequacy and effectiveness of internal controls.

10.3.9 Audit and Risk Committee

Universities should have an independent Audit and Risk Committee that reports directly to the Council of the university. Council should ensure that the members of this committee possess the requisite competence to serve on the committee. The Audit and Risk Committee should have unfettered access to the Internal Audit Department. It should have a charter, which should set out its terms of reference and guide its approach.

10.3.10 Internal Audit

Internal Audit should be urged to consider the existence of fraud when conducting their audits within the university environment. The traditional role of “tick and bash” to verify compliance with policies and procedures by internal auditors is inadequate in detecting and preventing fraud. Internal Audit departments at universities should also consider broadening their traditional role to include educating and advising management about the internal control environment. Internal Audit should provide an advisory service to management about designing the internal control environment. Management should be educated about designing

internal controls in a structured manner while considering the risk of fraud. This will assist management in pursuing a structured approach in designing, implementing and monitoring internal controls that detect and/or prevent fraud. Internal Audit should liaise with External Audit about the outcome of the internal audit projects insofar as they may impact on the external audit process. Internal Audit must produce work of a requisite quality that would provide assurance to External Audit, and not result in a duplication of effort.

10.3.11 External Audit

External Audit should consult with Internal Audit and Forensic Audit about the nature and extent of fraud, in line with the ISA 240 requirement, where it is expected that External Audit considers the risk of material mis-statement in the financial statements due to fraud and error, when planning and conducting the external audit process. External Audit should not unduly duplicate the effort of Internal Audit, which also has a role to play in providing assurance about the strength and effectiveness of the internal control environment.

10.3.12 Whistle-Blowing

Information about the whistle-blowing facility, coupled with advice about how to report fraud, should be provided to all stakeholders by the university. Stakeholders may be in possession of valuable information about fraudulent activities but are unaware of how to report them. A successful whistle-blowing system should cater for anonymity and confidentiality, and preferably be independently operated. Whistle-blowers need to be assured that the university will protect them from any harm due to the reports they make. The key to the success of a whistle-blowing facility lies in the manner in which awareness is created about its existence as well as the manner in which the university responds to the anonymous reports from whistle-blowers.

10.3.13 Criminal Prosecution

Fraud is a criminal offence and should be reported to the SAPS so that the perpetrator can be prosecuted and punished for his/her deed. Management at the university is obliged to report incidents of fraud to the SAPS who will investigate the allegations and liaise with the relevant criminal court about the prosecution of the perpetrator. Failure by the Vice-Chancellor of the university to report fraud and related corrupt activities, in terms of Section 34 (1) (b) of the

Prevention and Combating of Corrupt Activities Act 12 of 2004, is deemed unlawful and renders him/her liable to be prosecuted.

10.3.14 Disciplinary Action

The university should design and implement a disciplinary code, which stipulates that fraud is regarded as serious misconduct. The disciplinary code should also stipulate the sanction that could be imposed on the fraudster. Dishonesty is the *sine qua non* of fraud. Therefore, an irretrievable breakdown in the trust relationship between the employer and employee justifies the termination of employment. Disciplinary action should be instituted after completion of the internal investigation and after a forensic report has been issued. The Human Resources Department of the university should be consulted before the commencement of the disciplinary process because they are in a position to advise, *inter alia*, on the compilation of charges and the suspension from duty of the perpetrator.

10.3.15 Loss Recovery

The recovery of the financial loss should form part of the investigation process at the university. The fraudster should be requested to reimburse the university the misappropriated funds. If the fraudster is in agreement to repay the university, then an “acknowledgement of debt” document should be compiled and signed in consultation with the Legal Department of the university. Universities can rely on Section 37D (1) (b) (ii) of the Pension Funds Act 24 of 1956 to recover the loss from the pension or retirement fund of the fraudster. A written acknowledgment is required from the fraudster or a judgement from a court of law. The university should ensure that its insurance policy covers infidelity by employees, because the financial loss sustained by the university due to employee fraud, could be recovered from the insurers. Alternatively, universities could litigate against the fraudster and recover the financial loss by judgement from a civil court. In such a litigation claim for damages, the university could include the costs incurred for investigating the fraud as well as legal costs. A further alternative available to the university is to request the criminal court that is prosecuting the fraudster to issue a “compensation order” in terms of Section 300 of the Criminal Procedure Act 51 of 1977, which will compel the fraudster to reimburse the university for the financial loss.

10.3.16 Due Diligence

Due diligence is essential before employing a person and before contracting with a supplier. The university should implement a policy that sets out the process that should be followed during the recruitment and selection of a potential employee. The objective is to employ a person who meets all the minimum requirements for the position that s/he has applied for. Management should be cognisant of the risk that potential candidates may submit falsified information and/or documents in support of their application for employment. The Human Resources Department at the university should ensure that thorough and careful vetting is conducted before an individual is offered a position at the university. The verification process should include, *inter alia*, independent reference checks (calling the previous employer directly), previous salary earned, authenticity of qualifications and the reasons for termination of previous employment. In an endeavour to address employee fraud, universities should also consider remunerating employees appropriately, as well as devising retention strategies.

Before conducting due diligence on suppliers, the university should implement a procurement policy which stipulates how the Procurement Department should vet potential suppliers before authorising them to become registered suppliers to the university. The vetting process should be carried out carefully and thoroughly. Some of the credentials that should be requested from the potential supplier should include, *inter alia*, the company registration certificate, VAT clearance certificate and an original letter from the bank indicating the banking account details.

10.3.17 Legislation

In addressing employee fraud, the university should ensure that it complies with all relevant legislation. Compliance with the following relevant sections of legislation is essential: *inter alia*, Sections 29 and 195 of the Constitution of the Republic of South Africa Act 108 of 1996; Section 27 of the Higher Education Act 101 of 1997; Schedule 1 of the Prevention of Organised Crime Act 121 of 1998; Section 1 of the Protected Disclosures Act 26 of 2000; Section 34 of the Prevention and Combating of Corrupt Activities Act 12 of 2004; Section 129 of the Companies Act 71 of 2008 and Section 37 of the Pension Funds Act 24 of 1956.

10.3.18 Frameworks

There are various frameworks that are available globally which universities should refer to when designing a holistic fraud risk management framework to prevent employee fraud. The

frameworks that are listed below provide a broad perspective on preventing fraud to ensure that the approach of the university is holistic in this regard. Universities should refer, *inter alia*, to the following:

- KPMG Fraud Risk Management Model:
 - Fraud Prevention
 - Ongoing Process
- COSO Internal Control Integrated Framework:
 - Control Environment
 - Risk Assessment
 - Control Activities
- King III Code on Corporate Governance:
 - Ethical Leadership and Corporate Citizenship
 - Audit Committees
 - Governance of Risk
 - Internal Audit.

10.3.19 Investigation Capacity

The university must respond to allegations of fraud that are reported, by either having the matter investigated by dedicated university employees, engaging external investigators and/or referring the matter to the SAPS. The allegation of fraud should be investigated by individuals who are competent to do so due to the inherent risks present in addressing a complex crime such as fraud. All forensic investigations into fraud should be dealt with sensitively and confidentially and within the ambit of the law.

10.3.20 Fraud Risk Management

The management of fraud risks should be allocated to a particular department at the university that has the necessary expertise to address the inherent complexity of fraud. The fraud risk management strategy should be holistic and include interventions aimed at detecting, preventing and responding to fraud. In support of the strategy, it is essential that the university designs and implements a fraud prevention plan. Interventions such as forensic data analysis, fraud risk assessments and surprise forensic audits, are reliable ways of detecting and preventing fraud.

10.3.21 Fraud Awareness Education

Universities should embark on a comprehensive fraud awareness education campaign. The objective is to educate stakeholders on how to identify fraudulent schemes, how to report them and how they will be dealt with by the university. The information provided in the presentations should be compiled in such a manner that the information is not used by fraudsters to hone their *modus operandi* in order to evade detection. Universities should also consider publishing a regular anti-fraud newsletter for employees and students.

10.3.22 Performance Assessment

In pursuit of sound governance at universities, it is recommended that the assessment of the performance of managers also includes the measurement of incidents of fraud that occurred within their internal control environment. Universities should consider including governance as a key performance area for all managers, which should include ethical lapses, fraud, theft, corruption and other related irregularities that occurred within their areas of operations. These lapses should result in a financial penalty against the managers in relation to the performance management process *vis-à-vis* the payment of performance bonuses.

10.3.23 Course Curriculum

Universities should consider offering fraud risk management as a module within the curriculum for degrees related to auditing, accounting and law. According to Larson (2006:16), little is being done by tertiary institutions to incorporate forensic accounting concepts into their curricula in order to provide undergraduates with fraud prevention skills. The gap in the curricula of universities could possibly be addressed by creating a partnership between universities and the ACFE, which has embarked on an “*Anti-Fraud Education Partnership*” initiative with universities throughout the world. The ACFE provides certain resources for the fraud examination course to universities at no cost.

10.4 CONCLUSION

The recommendations in this chapter are based on data that were collated from various sources during this study. This chapter provides recommendations that could be implemented by universities without significant effort or resources. It is accepted without contestation that employee fraud is currently negatively impacting the financial viability of universities. In

conclusion, the findings of this study have provided a profound understanding of employee fraud and prevention strategies at universities in KwaZulu-Natal, and have broadened our insight into the *modi operandi* of both fraudsters and universities.

The objectives of this study were to gain increased knowledge and understanding of fraud at universities and to establish the causes as well as the nature and extent of fraud committed by employees. The study also aimed to establish the additional measures that were implemented by universities to prevent fraud. Appropriate theoretical criteria were identified for fraud prevention and were included in the conceptual model and set of recommendations to universities for implementation. The empirical survey was conducted to determine the extent of employee fraud and related factors at universities in KwaZulu-Natal. The results of the statistical analysis and recommendations are intended to address the dysfunctional situation around fraud as set out in the problem statement. The conceptual model and these recommendations are proposed for fraud prevention at universities in general and in KwaZulu-Natal in particular.

Chapter One highlighted the need to combat fraud due to its ubiquitous nature and the negative impact it has on organisations throughout the world. Internal controls were not found to be the only solution to prevent fraud. Inculcating an ethical culture within the university would also contribute towards preventing fraud. Trust and collegiality are essential but require some circumspection when dealing with fraudulent conduct in the workplace.

Chapter Two delved into the history and origins of fraud. In the early years, control mechanisms were designed and implemented to prevent fraud. It was found that fraud prevention interventions should keep up with the changing business landscape because fraud has become more sophisticated in recent times. Internal controls are not the only solution to combat fraud. Fraud is committed in a variety of ways but the hallmarks of fraud are the act, conversion and concealment.

Chapter Three expounded the theoretical concepts of fraud, including discussion of some popular models. The nature and extent of employee fraud as well as the *modi operandi* and motives of fraudsters were elaborated upon. This chapter also dealt with the profiling of typical fraudsters and the red flags for which we need to be vigilant. This study found that lapses in

the ethical culture within organisations need to be addressed. A significant finding was that most of the frauds were committed by senior management.

In Chapter Four, the need for preventing fraud was emphasised. It is essential that organisations inculcate a sound ethical culture. In this regard, a code of ethics was identified as critical for preventing fraud at universities; furthermore, this code should be well communicated to all employees, clients, suppliers and other stakeholders. The study also found that the leadership of an organisation should lead by example and set a high standard of ethical conduct. Legislation, regulatory frameworks and anti-fraud policies and procedures are essential for combating fraud. This chapter also highlighted the value of whistle-blowing as a fraud prevention initiative.

Chapter Five explored the origins of internal controls as a fraud prevention measure. Certain frameworks relating to internal controls were examined, as well as the nature and objectives of internal controls, and their design and implementation. The COSO Internal Control Integrated Framework was explained with respect to constructs that were selected for this study.

Chapter Six dealt with the theoretical and historical perspectives of corporate governance. Corporate governance is an integral part of fraud risk management. This chapter also expounded on various relevant legislation. Governance was discussed from the perspective of King III; Batho Pele principles; the National Development Plan 2030 and the African Charter, with respect to addressing fraud and corruption.

Chapter Seven dealt with the methods that were used in the study to collect, analyse and interpret the data. The participation by senior members of universities in this study provides confidence about the findings. The involvement of knowledgeable individuals as well as the collection of data from fraud case files contributed towards validity and reliability.

Chapter Eight contained the interpretation, presentation and articulation of the results of the statistical analysis of data collected from the survey questionnaire; face-to-face interviews that were conducted with knowledgeable individuals; review of fraud case files and the literature search. The findings showed conclusively the causes and nature of employee fraud. The findings also revealed what measures were implemented by universities to prevent fraud. They too showed the type of fraud prevention measures that should be implemented by universities.

Universities are undoubtedly victims of fraud and they incur a financial loss due to employee fraud. Management was found to be involved in committing fraud against the university. This chapter also highlights the best practice governance practices that universities should implement to prevent fraud.

Chapter Nine expounded on the various fraud prevention models that are available. The adaptation of the input/output transformational systems model was used to design and present a conceptual model. The conceptual model, which uses the guitar as an analogy, provides a holistic approach to fraud prevention at universities in KwaZulu-Natal. This chapter highlights the need for a multi-faceted approach to fraud risk management.

Based on the findings and recommendations of this study, the proposed way forward is that universities in KwaZulu-Natal revisit their current fraud risk management strategy and approach, and compare it to the recommendations of this study. Should any gaps be found in the current approach of these universities, management should consider implementing the recommendations.

Researchers in the field of fraud risk management may wish to conduct further research in this area or use this research thesis as a point of reference. Due to the complexity of the phenomena expounded in this investigation, further study is recommended based on the outcomes of this research, which could serve as a stepping-stone towards finding solutions to the global incidence of these crimes. This study highlighted the need for a holistic approach to preventing fraud and should be considered as a departure point for further research.

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ETHICAL CLEARANCE



18 December 2014

Mr Ranesh Sivnarain 214576210
School of Management, IT & Governance
Westville Campus

Dear Mr Sivnarain

Protocol reference number: HSS/1045/014D

Project title: Employee fraud and prevention strategies at Universities in KwaZulu-Natal

Full Approval – Expedited Application

In response to your application received on 27 August 2014, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted **FULL APPROVAL**.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

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

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

Yours faithfully

Dr Shenuka Singh (Chair)
Humanities & Social Sciences Research Ethics Committee

/pm

Cc Supervisor: Professor IW Ferrira and Professor HF Wissink
Cc Academic Leader Research: Professor Brian McArthur
Cc School Administrator: Ms Angela Pearce

Humanities & Social Sciences Research Ethics Committee

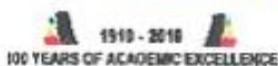
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Four main Campuses: ■ Edgewood ■ Howick College ■ Medical School ■ Pietermaritzburg ■ Westville

SURVEY QUESTIONNAIRE

SECTION A**Biographical and employment information of participant:**

A1 Gender

Male		Female	
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A2 What is your highest qualification?

Post Doctoral Degree	
Doctoral Degree	
Masters Degree	
Honours Degree	
Bachelors Degree	
National Diploma	
Other	

A3 What is your job category?

Executive Management	
Senior Management	

A4 How long have you been in your current position?

1 year	
2 years	
3 years	
4 years	
5 years	
More than 5 years	

SECTION B**Indicate your opinion as to what were the underlying causes of fraud committed by employees:**

No.	Statement / question	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
B1	I believe that the university has been a victim of fraud committed by employees since 2013.					
B2	I believe that dishonesty is a trait of fraudsters.					
B3	I believe that fraudsters exploited their superior's trust.					
B4	I believe that greed was the motive of the fraudsters.					

B5	I believe that inadequate internal controls led to employees committing fraud.					
B6	I believe that poor ethical culture led to employees committing fraud.					
B7	I believe that other factors led to employees committing fraud.					

SECTION C

Indicate the frequency with which the following items regarding the nature of fraud have occurred:

No.	Statement / question	Never	Rarely	Sometimes	Often	Always
C1	The university suffered financial loss due to frauds committed since 2013.					
C2	The fraudsters worked in a finance or procurement related role.					
C3	The fraudsters colluded with other staff and / or third parties to commit fraud.					
C4	The fraudsters circumvented internal controls to commit the fraud.					
C5	The internal controls were overridden by the fraudsters to commit the fraud.					
C6	The frauds were disguised to appear normal					
C7	The frauds related to procurement of goods/services.					
C8	The frauds related to expense claims.					
C9	The frauds related to the falsification of documents / records.					
C10	The frauds related to a misuse/misappropriation of university resources.					
C11	The frauds related to solicitation of bribes from suppliers / students.					
C12	The frauds related to a conflict of interest.					
C13	The value of each fraud was					

	below R100 000.					
C14	The fraudsters were members of management.					

SECTION D

Indicate your agreement with the following statements regarding measures that are in place to prevent fraud:

No.	Statement / question	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
D1	Allegations of fraud are usually investigated by internal university staff.					
D2	Management is generally responsible for designing and implementing internal controls.					
D3	The university has adequate policies which address fraud risks.					
D4	Adequate fraud prevention workshops are held within affected departments at the university after conclusion of fraud investigations.					
D5	I believe that the internal controls at the university are robust enough to prevent fraud.					
D6	Management adopts a structured approach when designing internal controls.					
D7	Internal controls prevent fraud from occurring at the university.					
D8	Incompatible duties are adequately segregated at the university to prevent fraud from occurring.					
D9	I believe that the university conforms to the universal governance principles of fairness, accountability, responsibility and transparency in the way in which it operates.					
D10	Management is responsible for preventing fraud at the university.					

D11	Internal auditors are responsible for preventing fraud at the university.					
D12	External Auditors are responsible for preventing fraud at the university.					
D13	Audit & Risk Committees are responsible for preventing fraud at the university.					
D14	The university manages fraud risks in a systematic manner.					
D15	The fraud risk management process of the university is effective.					
D16	The university takes adequate action to recover losses from fraudsters.					
No.	Statement / question	Never	Rarely	Sometimes	Often	Always
D17	The university takes disciplinary action against fraudsters.					
D18	The university criminally prosecutes fraudsters.					
D19	The university provides fraud awareness training to staff.					

SECTION E

Indicate your agreement with the following statements regarding the implementation of global best practices in order to prevent fraud:

No.	Statement / question	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
E1	The university should have an internal audit department.					
E2	The university should have an independent audit and risk committee.					
E3	The university should have a code of ethics for all staff.					
E4	The university should provide an anonymous whistle blowing hotline to enable staff and students to report suspicions of fraud.					
E5	Executive Management should regularly communicate a strong					

	ethical culture to staff.					
E6	Management should investigate matters reported to it via the whistle blowing facility.					
E7	The university should conduct adequate ongoing identification and assessment of significant fraud risks (including root cause analysis and implementing mitigating controls).					
E8	Management should design and implement internal controls and monitor these on an ongoing basis.					
E9	Governance at the university should be based on current best practice.					
E10	The university should conduct due diligence when employing staff.					
E11	The university should conduct due diligence when contracting with 3 rd parties.					
E12	The university should create awareness about the existence of the whistle blowing facility to staff and students.					
E13	The university should conduct forensic data analytics in order to detect fraud amongst large volumes of data.					
E14	The university should conduct surprise fraud audits.					

SECTION F

Kindly answer these questions by providing your opinion:

F1 What interventions should management embark on to prevent incidents of employee fraud?

F2 Please provide a few examples of internal controls that prevent fraud from occurring.

F3 Apart from internal controls what other interventions would prevent fraud?

F4 Which internal controls were found to be deficient; and provided the opportunity for fraud to be committed?

F5 What enhanced internal controls are in place to prevent fraud from recurring?

F6 How did management address these other factors which led to fraud being committed?

THANK YOU FOR YOUR PARTICIPATION

INFORMED CONSENT

Fraud Prevention at Universities | QuestionPro Survey

Page 1 of 1

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1%

[Exit Survey](#)

Dear Respondent

I, Ranesh Sivnarain, am a Doctor of Administration student, at the School of Management, IT & Governance of the University of KwaZulu-Natal. You are kindly invited to participate in a research project entitled EMPLOYEE FRAUD AND PREVENTION STRATEGIES AT UNIVERSITIES IN KWAZULU-NATAL.

The aims of this study are:

- To establish the causes of employee fraud.
- To establish the nature of fraud committed by employees at universities.
- To establish the measures which are put in place to prevent fraud.
- To understand the measures which universities need to implement to prevent fraud.

Through your kind participation I hope to understand employee fraud and its causes. The results of the survey are intended to contribute to improving the measures put in place by universities to prevent fraud. Your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time with no negative consequence. There will be no monetary gain from participating in this survey. Confidentiality and anonymity of records identifying you as a participant will be maintained by the SCHOOL OF MANAGEMENT, IT AND GOVERNANCE, UKZN. The researcher undertakes to safeguard hard copies of the data by means of a lock and key for a period of five years. Thereafter, hard copies of the data will be shredded personally by the researcher using a mechanical paper shredder.

If you have any questions or concerns about completing the online questionnaire or about participating in this study, you may contact me or my supervisor at the numbers listed below. The online survey should take you approximately 20 minutes to complete.

Researcher: Mr Ranesh Sivnarain 031-260 7822 Mobile: 0832775464.
 Supervisor: Prof IW Ferreira 041-504 4607 Mobile: 0846073878.
 Research Office: Ms P Ximba 031-260 3587.

Thank you very much for your time and support. Please start with the survey now by clicking on the Continue button below.

I Agree

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Online Survey Software Powered by 

SCHEDULE 1 OFFENCES

Criminal Procedure Act (Act 51 of 1977)**List of Schedule 1 Offences**

Treason

Sedition

Murder

Culpable homicide

Rape

Indecent assault

Sodomy

Bestiality

Robbery

Assault, when a dangerous wound is inflicted.

Arson

Breaking or entering any premises, whether under the common law or a statutory provision, with the intent to commit an offence.

Theft, whether under the common law or a statutory provision.

Receiving stolen property knowing it to have been stolen.

Fraud

Forgery or uttering a forged document knowing it to have been forged.

Offences relating to the coinage.

Any offence, except the offence of escaping from lawful custody in circumstances other than the circumstances referred to immediately hereunder, the punishment wherefor may be a period of imprisonment exceeding six months without the option of a fine.

Escaping from lawful custody, where the person concerned is in such custody in respect of any offence referred to in the Schedule or is in such custody in respect of the offence of escaping from lawful custody.

Any conspiracy, incitement or attempt to commit any offence referred to in this Schedule.

LETTER FROM STATISTICIAN

Gill Hendry B.Sc. (Hons), M.Sc. (Wits)
Mathematical and Statistical Services

Cell: 083 300 9896
email : hendryfam@telkomsa.net

20 July 2015

To whom it may concern

Please be advised that I have assisted Ranesh Sivnarain (student number 214576210), who is presently studying for a Doctor of Administration, with the questionnaire validity and statistical analysis for his study.

Yours sincerely

Gill Hendry (Mrs)

LETTER FROM LANGUAGE EDITOR

TO WHOM IT MAY CONCERN

22 July 2015

EDITING CERTIFICATE

This dissertation, entitled

**EMPLOYEE FRAUD AND PREVENTION STRATEGIES AT UNIVERSITIES IN
KWAZULU-NATAL**

by Ranesh Sivnarain,

has been edited to ensure technically accurate and contextually appropriate use of language for research at this level of study.

Yours sincerely

A handwritten signature in blue ink that reads "CM Israel". The signature is stylized with a long horizontal stroke at the bottom.

CM ISRAEL
BA Hons (UDW) MA (UND) MA (US) PhD (UNH)
Language Editor



Deloitte Forensic Center

Helping to Prevent University Fraud

By Ron Schwartz
Matthew Larson and
Mary-Jo Kranacher



Audit . Tax . Consulting . Financial Advisory .

For a long time, universities have been viewed as bastions of high ethical standards where the fraudulent schemes common to the workaday world simply would be unthinkable. Increasingly, however, this is proving to be untrue. Instead, universities are as rife with scams as other organizations and as much in need of adopting strong anti-fraud policies and procedures.

The types of fraudulent schemes are legion. The perpetrators come from many levels of the university—from presidents, whose authority makes committing large fraud easy, to maintenance workers who might be tempted, as in a recent case, to switch the new tires on the college van with the old ones from his personal vehicle. Schemes tend to start small and can increase as they succeed.

Reasons for the particular vulnerability of universities to fraud tend to boil down to the late Donald Cressey's Fraud Triangle: the **incentives and pressures** to steal are strong, given relatively moderate salary levels and the reluctance of most universities to prosecute from fear that fundraising will be hurt by negative publicity; the **opportunities** are ample given the usual lack of segregation of duties due to ongoing budget cuts; and **rationalization** is easy in an environment with little comprehensive oversight where there is a perception that everyone

is doing it, especially those at the highest levels of the institution. "Basically anyone who has the incentive and opportunity to commit fraud, and believes they can get away with it, is likely doing it," says CPA and Certified Fraud Examiner, Mary-Jo Kranacher, a professor at York College, CUNY, who participated in a recent panel discussion with members of Deloitte Financial Advisory Services LLP ("Deloitte FAS"): Ron Schwartz, Principal in the Forensic & Dispute Services practice and Matthew Larson, Senior Manager in the Forensic & Dispute Services practice.

Uncovering fraud can be difficult because of the concealment efforts of the perpetrator. Fraud detection engagements are usually prompted by a tip. When investigating an allegation of fraud, a multi-pronged approach including 1) gathering and analyzing physical and electronic records to detect reporting anomalies; 2) interviewing employees—at all levels—who may have information about the fraud; and 3) reviewing e-mails for relevant information could prove to be crucial in helping detect fraud. Building a strong case can potentially help to illicit a confession from the perpetrator. Once a fraud scheme has been identified, stronger policies, procedures and controls should be designed and implemented to minimize the risk of future fraud.

Some of the key issues you may want to consider when putting together a plan to help reduce fraud in colleges and universities include:

1. **Tone at the top.** If the president and other high-level administrators turn a blind eye to fraud, so will everyone else.
2. **Clearly written policies and procedures.** These should be spelled out carefully and in writing so that employees are familiar with the university's code of conduct and the consequences for violating it. In addition, an ethics policy should be implemented and enforced.
3. **Training.** This is an important preventative. Employees are often surprised by what constitutes fraud since there can be grey areas. Round table discussions can help clarify these issues. Online courses can help stretch scarce resources effectively.
4. **Using an external whistleblower hotline.** Encourage employees to report potential problems by implementing a well-advertised hotline that provides anonymity to prevent retaliation by those in charge.
5. **Implement strong anti-fraud controls.** This step is just as essential for universities, as it is for other types of organizations.
6. **Enforcement as deterrent.** In the past, because universities feared the negative impact fraud could have on fundraising, the administrators often refrained from publicizing fraud and the actions taken against the perpetrator(s). However, keeping the problem quiet and allowing the perpetrator(s) to quietly resign did little to discourage future wrongdoing.
7. **Paying attention to small transgressions.** Since fraud generally starts small and can grow over time, addressing even the smallest transgression is instrumental in preventing future scandals.
8. **Prevention first.** Once fraud has been committed and the university's money is spent, it is difficult to recoup the losses. It is far better to keep theft from happening in the first place.

Keeping these factors in mind when confronting fraud at your university can help enhance deterrence and prevent future problems.

How and why is fraud committed at universities and what can be done to prevent it?

1. Common Fraud schemes:

Common fraud schemes at universities include misuse of procurement cards (“p-cards”), padding expense accounts, listing fictitious vendors, rigging vendor bids, taking kickbacks and abusing payroll and overtime by fraudulent reporting of work hours.

P-cards particularly lend themselves to abuse since, without tight oversight, employees have carte blanche to charge whatever they want to the university. “We have investigated employees who use the cards to make personal purchases at the hardware store; take trips for personal reasons, but disguise them as business trips; and even one employee who leased a car for personal use when her car broke down for two-to-three months,” says Schwartz, who is a specialist in financial-analysis modeling and internal-control consulting. “Investigations of p-cards can lead to finding more grievous instances of fraud.”

Other schemes can involve paying family members from the university’s payroll account. In one case, a Deloitte FAS team uncovered approximately \$500,000 in fraudulent charges over the time span of a couple of years for transcription services that been paid to a relative of an employee who was approving the invoices.

In another instance, an employee was selling university computer assets on eBay and “pocketing” the proceeds. He was caught when a Deloitte FAS team did a search of employee internet usage patterns looking for frequent visits to work-inappropriate sites.

Collusion between employees can help to perpetrate and conceal a fraud. In a recent Deloitte investigation, in concert with a colleague from accounting, a university employee in human resources set up his relatives, who were not employed by the university, as “ghost employees” on the payroll. This allowed university assets to be misappropriated through payroll money going to people who provided no services to the school and to the insiders who were the architects of the scheme.

Another common fraud scheme is overtime abuse. Employees can manipulate the system and get paid for tens of thousands of hours that were not worked. Testing time systems for anomalies can make this kind of fraud apparent, although sometimes clever fraudsters record their overtime over numerous departments and reporting centers so that the abuse is harder to detect.

2. Why fraud occurs:

Specific environmental factors that can contribute to fraud at universities include: silo-ed reporting structures with multiple schools, departments, and programs running independently; budget cuts that affect the segregation of duties for effective internal controls; long tenures contributing to abuse of trust; a liberal control environment and resistance to controls; the lack of written policies and procedures; nepotism; and a lack of financial acumen by the university staff.

Starting at the top, administrators are in a position to override controls. They can authorize payment of a bill that may have been incurred for personal purposes and the people who work below them are reticent to challenge them on paying it without the proper documentation because of fear of retribution or retaliation. "You can have phenomenal controls, but they won't work if someone overrides them," says Schwartz.

Often, lax controls enable misuse of funds or concealment of a fraud, as is sometimes the case with grants at research institutions or with operations of college-related entities—such as foundations, auxiliary enterprises (e.g. parking lot, cafeteria) and student associations.

One way this might occur is if an individual with access to the electronic files changes the financial data, after they have committed the fraud, to eliminate the paper trail.

Insufficient staff can also lead to problems when overwhelmed supervisors rubber stamp authorizations or the same person has the power to authorize and execute transactions. Segregation of duties is a basic control in the fight against fraud.

3. What to do about fraud:

Discovering fraudulent schemes at universities, as elsewhere, can be like searching for a needle in a haystack. The Deloitte FAS team generally takes the following approach:

- Forensic accountants interview key personnel, irrespective of their level.
- AFT personnel use technology to harvest and analyze the digital evidence.
- After Deloitte FAS has finished its fraud investigation, the next step is to work closely with Enterprise Risk Services ("ERS") personnel of Deloitte & Touche LLP who can help manage, design, and implement new controls.

Interviews

It is important to interview people at all levels. This can be especially useful when trying to detect deception at the top. Blunt questions, such as whether an employee has been asked to override controls or book transactions without appropriate supporting documentation, should be asked. Employees should also be asked if they have any concerns about the integrity of management or the relationship of employees with vendors or suppliers or other employees.

Special attention should also be given to the interviewee's reaction to these pointed questions, not just to the verbal responses, but also to the body language. "We have had a lot of success obtaining valuable information by conducting interviews as part of our forensic engagements in helping to identify the perpetrator," says Schwartz.

Kranacher agrees. "It is people who commit fraud, not computers or books. There is usually somebody else who knows about it. Many people are afraid to come forward and volunteer information, but if you go to them and ask them the questions, they may answer honestly," she notes.

Gathering and analyzing the evidence

Interviewers must work together with those gathering and analyzing the evidence, so that the results from one line of inquiry can be used to fuel the other to build a solid case.

Forensic accountants search the data—whether hard copy or electronic—gathered through emails or computer systems. Often, anomaly testing will reveal red flags that bear further scrutiny. Recurrent patterns can be another tip off.

Technology is an integral tool that assists forensic specialists in looking for fraud. It offers a cost-effective and efficient way to work through thousands, and potentially millions, of records. Since each scheme, from p-cards to overtime abuse, involves its own data sets, forensic professionals can build rules and procedures for a specific scheme to identify anomalies.

"It is an iterative process," says Larson, who has worked on more than 300 computers in the search for fraud. Initially data that is harvested is analyzed and then used in interviews. Then, information obtained from interviews may prompt going back to the computer data and more relevant data may be identified, which then helps interviewers ask more well-honed questions. "So not only

does technology help the forensic professionals get through large volumes of data quickly, but it also helps pinpoint some of the specific areas of fraud," he says.

Generally, running anomaly detection tools for criteria such as employees sharing the same bank account numbers or addresses, or vendors and employees sharing the same bank account numbers or addresses, can provide important information. Timing of expenditures can also offer clues. E-mails are searched for signs that controls are being circumvented. Deleted files can be another "smoking gun." Carefully comparing records on back-up files with later records or different versions of emails on various electronic devices, such as PDAs and computers, can really help a forensic engagement.

Running keywords related to the suspected fraud can also help to efficiently detect fraudulent behavior. Keywords can range from simple words to complex expressions and can be tailored to suit the investigation. Boolean operators such as 'and', 'or' and 'not' can help target the resulting population.

Designing and implementing controls

Once fraud is discovered, strong controls should be designed and implemented to prevent it from happening again. "If people know that there is a robust anti-fraud control program at the university, including anomaly detection, they will think twice before perpetrating a fraud," says Schwartz.

Top administrators can set the tone within the institution by leading by example and establishing a strong culture of compliance. Open lines of communication—among the internal and external auditors and the staff—can also help to reduce fraud.

Implementing training programs at all levels of the organization can help reinforce the message that the university has a zero tolerance policy as it relates to fraud. A combination of in-person and online education is usually effective. As Kranacher notes, often employees do not realize they are doing anything wrong, as was the case recently, when a professor was caught selling review copies of books that he received for free from a publisher, to his students at a "discount" from the retail price.

Whistleblower hotlines that are run by third parties can also help employees to report wrongdoing. Effective hotlines should be anonymous to reduce the risk of retribution. Moreover, there must be both the reality and perception that something will be done about the allegation. The hotline should be open to employees, vendors and suppliers alike.

Periodic analysis of the data to detect anomalies is an easy way to uncover certain frauds, such as employees submitting the same expense twice via p-card and expense account, and can also serve as a deterrent.

Conclusion

Scarce resources and a culture of lax controls can make any organization, including universities, vulnerable to fraud. Whether overstating overtime or misusing p-cards, fraud schemes to misappropriate university funds abound.

Investigating allegations of fraud, through rigorous data gathering and analysis and by interviewing employees at all levels, is crucial in the fight against fraud. These efforts should be followed up by implementing robust controls and enforcing established penalties for violators.

Universities should not shy away from prosecuting those who commit fraud. If there is no punishment for the crime, it sends a message that it is acceptable to steal from the university, and many employees will continue to take their chances. Our universities, especially those supported by taxpayer dollars, deserve better.

University Fraud Bios

Ron Schwartz

Mr. Schwartz is a principal at Deloitte Financial Advisory Services LLP. He has provided forensic and dispute services, including expert witness testimony, for clients in the not-for-profit and higher education sectors as well as manufacturing, healthcare, real estate, food and beverage, retail, service, insurance and telecommunications industries. He specializes in providing forensic investigation, internal control consulting, fraud prevention consulting and arbitration services to his clients. You may contact Mr. Schwartz at rschwartz@deloitte.com.

Matthew Larson

Mr. Larson is a senior manager in the Analytic & Forensic Technology group of Deloitte Financial Advisory Services LLP. His background includes management of engagements ranging from theft of intellectual property or allegations involving only a single laptop, to multinational government fraud investigations that required the imaging and review of multiple computers and the restoration of e-mail and network files from thousands of backup tapes. Mr. Larson may be contacted at malarson@deloitte.com.

Mary-Jo Kranacher

Mary-Jo Kranacher is a certified public accountant (CPA) and a certified fraud examiner. She is the editor-in-chief of *The CPA Journal*, the official publication of the New York State Society of CPAs. She is currently on leave from her tenured position as an accounting professor at York College, The City University of New York (CUNY). Prior to joining the CUNY faculty, she was the University's Director of Trusts and Gifts, where she was responsible for the oversight of a \$140 million investment portfolio which she monitored for fraud and abuse.

About Deloitte

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WATCH OUT FOR CAMPUS FRAUD

7/20/2015

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Watch out for campus fraud

March 17 2015 at 02:41pm
By Lesane Jensen

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Durban - South African universities were fertile ground for fraudsters, in part because of the collegial environment and compounded by staff freezes which reduced financial controls, a higher education conference in Durban heard on Monday.

The warning came from financial forensic experts who warned that universities were just as vulnerable to fraud as any other organisation. They said fraudsters were usually employed at an institution for six years or longer and were in an executive function.

In some cases there was a notion that everyone was involved in fraud, "so why not me?"

The conference, hosted by forensic audit firm KPMG, and the Higher Education Internal Audit and Forensics Audit forum, was attended by delegates from universities around the country, and included vice-chancellors and IT and finance practitioners.

While fraud at universities was not unique to South Africa, it was thriving here, said one of the keynote speakers, Ranesh Sivnarain, the chairman of the Higher Education Internal Audit and Forensics Audit Forum.

Sivnarain, who is also the head of forensic services at the University of KwaZulu-Natal, said it had adopted a zero tolerance approach which involved dismissal and laying of criminal charges.

The forum, which was established last year, reports to the Finance Executives Forum of Higher Education South Africa.

Sivnarain told the conference that budget cuts and the freezing of posts contributed to fraud, because with fewer staff the segregation of duties was no longer possible. The result was a slackening or the absence of stringent financial controls.

Fraudsters would resign to avoid disciplinary hearings.

Sivnarain said these individuals would sometimes go on to gain employment at other universities.

Fraudsters were likely to be highly trusted employees who worked over holidays and weekends. Possible warning signs included an employee's lifestyle far exceeding salary, and documents being locked away.

Instances of the abuse of research funds included academics using the money to pay for family holidays, falsifying conference invitations, submitting false expense claims and awarding contracts to spouses.

Sivnarain said that establishing a whistle-blowers' hotline had proved successful, and that it was best to outsource this to an independent firm to avoid identification and victimisation of whistle-blowers.



South African universities were fertile ground for fraudsters, a higher education conference in Durban heard. FILE PHOTO: Leon Nicholas

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Fellow keynote speaker Candice Padayachee, associate director of forensic services at KPMG, said during <http://www.iol.co.za/news/crime-courts/watch-out-for-campus-fraud-1.1833270#VazKCvmqBc>

1/4

her presentation that universities were as vulnerable to fraud as any other organisations and emphasised the importance of cultivating an "ethical culture".

The competition for admission to university, and the desire to have a university qualification at all costs, had opened universities up to increased instances of fraud.

The rationale of fraudsters was often "everyone else is doing it" or "my employer owes it to me".

The top fraud risks in higher education included exam fraud, expense claim fraud, procurement fraud and misuse of research funds.

She too argued that budget cuts and vacancies meant weakened financial oversight.

Examples of fraud at universities:

- * Staff colluding with suppliers, such as charging for maintaining 14 fire extinguishers when there are only 10.
- * Invoices issued and paid but no goods or services provided.
- * An administrator changes the exam marks of a friend and because of 'blind trust' in the employee there is no oversight.
- * Falsifying of CVs. A manager concealing his dismissal from a previous employer and providing a falsified pay slip and degree certificate.
- * A manager shares the system user name and password with a PA who then buys electronic goods and buys flights and accommodation for employees who do not exist.

Universities were cautioned to guard against other risks including:

- * IT infringements (hacking, accessing pornography and excessive internet use).
- * EFT fraud (changing banking information to direct payment to an employee's bank account or a recipient related to an employee).

The Mercury

* This story has been updated after it was incorrectly stated that Ranosh Sivramin, the chairman of the Higher Education Internal Audit and Forensics Audit forum, was a university vice-chancellor. The error was introduced during the editing process and is regretted. The forum reports to the Finance Executives Forum of Higher Education South Africa, and not the finance committee, as stated.



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31



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UNIVERSITIES BATTLE A TIDE OF CHEATING

7/20/2015

TimesLIVE - Print Article

[Print this page \(#\)](#)

Universities battle a rising tide of cheating

Aug 17, 2014 | Prega Goveneder

Crib notes on the inside of a T-shirt, on rulers or the back of calculators - university students are brazenly cheating in tests and exams.



University of Johannesburg.

Photograph by: wikipedia commons

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At the universities of the Witwatersrand, Cape Town, Johannesburg, Stellenbosch, and North-West, as well as Unisa, among others, more than 1400 students have been found guilty of academic dishonesty, including plagiarism, in the past year.

Experts agree this figure is just the tip of the iceberg because many cheats are never caught .

Figures uncovered during a Sunday Times investigation of student cheating do not cover all the tertiary educational institutions in this country because only 10 of the 23 responded to a request for data.

Deputy Minister of Higher Education Mduzuzi Manana said he was worried about cheating and that academics had also spoken out.

"We don't need half-baked graduates in our country. We need graduates who have acquired enough knowledge to take it forward," said Manana.

He echoed the sentiments of his boss, Higher Education Minister Blade Nzimande, about the increasing incidence of qualifications fraud.

"We have said to our institutions that they must tighten all loose ends. Those who think they can get away with murder and cheat must be exposed," said Manana.

In response to widespread cheating, the University of South Africa (Unisa) barred 519 students from studying for

<http://www.timeslive.co.za/local/2014/08/17/universities-battle-a-rising-tide-of-cheating?service=print>

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at least three years for using "unauthorised material" during exams.

It permanently expelled 20 students for buying or selling exam papers.

Figures provided by other universities show that:

- 535 students cheated or plagiarised at North-West University;
- 153 did so at the University of Johannesburg;
- 66 at the Nelson Mandela Metropolitan University;
- 35 at Stellenbosch University;
- 31 at the University of the Witwatersrand;
- 27 at the University of the Western Cape; and
- 24 at the University of Cape Town.

The Tshwane University of Technology was among those afraid of having their image dented by releasing figures.

Spokeswoman Willa de Ruyter said in an e-mail meant for her colleagues, but which also reached the Sunday Times, that "... in the interest of preserving the university's reputation, we have decided to provide a generic response rather than responding to the specific questions".

North-West University, which has adopted a no-nonsense approach to plagiarism, slapped five postgraduate students with two-year bans, suspended for three years, for plagiarising their theses.

They were allowed to continue their research but were forced to change their topic.

A 21-year-old student studying for a commerce degree in communication management at the university was banned from campus for the rest of the year after she faked interviews with the Ekurhuleni municipality in Gauteng.

She was asked to produce content for an in-house magazine as part of a major assignment for her corporate journalism module, which required her to interview municipal officials.

Danelle Kamffer, a student judicial officer at the university's Potchefstroom campus, said the student "copied and pasted articles", pretending they were hers.

Kamffer said students caught cheating often complained of having enrolled for too many modules. "They said they had too little time to prepare for the exam or assignment. Many students who end up at disciplinary hearings were studying for a degree they were not interested in."

She said students were going to elaborate lengths to copy others' work during exams.

"One had written notes on the inside front of his white T-shirt. He would flip it over after the invigilator passed. It was by pure chance that the invigilator spotted him fidgeting with his shirt," she said.

At the University of the Western Cape, 18 students were barred from study for six months after forging signatures on time sheets intended to confirm that they had completed a specified number of clinical hours.

Luthando Tyhalibongo, the university's spokesman, said three cases of students purchasing fake medical certificates had been reported to the provincial health department.

The University of Cape Town's media liaison manager, Patricia Lucas, said that between September and July, students were convicted in 50 cases, including 13 cases of fraud and 24 of plagiarism.

Penalties included expulsion, suspension for up to two years, a term of community service, paying compensation for damages and writing a letter of apology to the complainant.

The University of Johannesburg said it focused on prevention and advocacy rather than conviction.

Wits professor Peter Cleaton-Jones, who investigated several cases of scientific misconduct against academics, was reluctant to comment on the extent of plagiarism at South African universities, saying it had not been "quantified".

"If you follow the international literature, you'll find that plagiarism is definitely on the increase because, with the internet and 'cut and paste' [word processing], people are able to just highlight a whole page and lift it."

govenderp@sundaytimes.co.za

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FRAUD AT STUDENT AID SCHEME

7/20/2015

BDLive - Print Article

[Print this page](#)

Probe into fraud at student aid scheme

Feb 19, 2015 | Wyndham Hartley

Education Minister admits fraud has reduced student aid scheme's ability to fund all who qualify

HIGHER Education Minister Blade Nzimande on Wednesday acknowledged that allegations of fraud and corruption in the National Student Financial Aid Scheme could be contributing to the scheme's inability to fund all students who qualify.

The country's universities and technical and vocational education and training colleges have been hit by student protests with classes being brought to a halt across the higher education sector. The Tshwane University of Technology, University of Johannesburg and the University of the Witwatersrand have been particularly hard hit.

Central to the protests has been that the National Student Financial Aid Scheme has not provided enough funding for poor students who qualify for funding or bursaries.

Mr Nzimande, addressing Parliament's higher education committee, said he had ordered an investigation into the allegations of fraud and corruption at the scheme because they threatened the stability of the entire higher education sector. The terms of reference had been finalised and bids were being advertised for suitably qualified people to run the inquiry.

Committee chairwoman Yvonne Phosa said inadequate funding by the National Student Financial Aid Scheme lay at the heart of the student protests and that even returning students at Tshwane University of Technology were not funded.

Mr Nzimande told the committee that R9.5bn had been allocated to the scheme for the 2015 academic year and that despite the challenges of the protests the "government continues to put a lot of money into support for poor students who qualify for loans and bursaries".

Some political parties, which he declined to name, were exploiting the situation in higher education institutions and this politicisation of the issue was contributing to the continuing protests.

Democratic Alliance MP Belinda Bozzoll asked Mr Nzimande if another R1bn could be found to defuse the protests. He also requested a relaxation of admissions targets set for universities and colleges.

"We are always looking for more money," Mr Nzimande said but indicated there was little chance of additional funds for the scheme being found.

Relaxing the admissions targets was "a tough one" because there was a huge demand for places in higher education institutions, he said.

African National Congress MP Julie Killian expressed concern at the high cost of tertiary education and asked what progress had been made in the investigation of these high costs.

The minister responded that he was investigating the "cost drivers" in the sector. This probe would also look at the possible control of increases in academic fees. "Why can one institution increase by 6% and another 12%?" Mr Nzimande asked.

About 205,000 first-time students and continuing eligible students at universities would receive funding, along with 200,000 students at technical and vocational education and training colleges.

Last year, the student aid scheme provided loans and bursaries of more than R8.3bn.

<http://www.bdlive.co.za/national/education/2015/02/19/probe-into-fraud-at-student-aid-scheme?service=print>

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UKZN FRAUD POLICY AND RESPONSE PLAN

**FRAUD POLICY AND RESPONSE PLAN**

Ref: CO/17/1502/08

Name of Policy:	Fraud Policy and Response Plan	
Reference Number: (supplied by the Office of the Registrar)	CO/17/1502/08	
Originator/Author: (name and position)	Audit and Risk Committee	
Custodian: (position/office)	Audit and Risk Committee	
Policy approved by:	Structure: EMC Audit and Risk Council	Date: 21.06.2007 30.01.2008 15.02.2008
Policy effective date:	15.02.2008	
Policy review details:	Date of Last Review – 27 May 2015 (no material changes) Reviewed By: Forensics (R Sivnarain) Next Review Date: To take Place When Necessary	
Implementation responsibility:		
Implementation procedures approved by:	Structure:	Date:
Policy to be monitored by:		

UNIVERSITY OF KWAZULU-NATAL
FRAUD POLICY AND RESPONSE PLAN

1. BACKGROUND

- 1.1 This policy is intended to set down the stance of the University of KwaZulu-Natal ("UKZN) to "fraud", as referred to in paragraph 2.2 below, as well as to reinforce existing systems, policies, procedures, rules and regulations of UKZN aimed at deterring, preventing, detecting, reacting to and reducing the impact of fraud of whatever nature or source.
- 1.2 Furthermore, the purpose and spirit of this document is to confirm that UKZN supports and fosters a culture of zero tolerance to fraud in all its manifestations.
- 1.3 UKZN recognises the fact that acts of fraud by its employees and students seriously deplete the resources available to UKZN in fulfilling its mandate.
- 1.4 UKZN also recognises that the debilitating effect of fraud extends beyond the loss of cash and other assets which has severe negative repercussions on the ability of UKZN to achieve its objectives.
- 1.5 Although difficult to quantify, such acts, if left unchecked, seriously impact on:
- (a) the quality and effectiveness of service delivery;
 - (b) the strength of business relations with external stakeholders (donor's etc.), suppliers and the public;
 - (c) employee morale; and
 - (d) reputation and image of UKZN.

2. SCOPE OF THE POLICY

Persons to whom the policy applies

- 2.1 This policy applies to all employees and students of UKZN and relates to all attempts and incidents of fraud impacting or having the potential to impact on UKZN and its activities.

2.2 Actions constituting fraud

- (a) any dishonest, fraudulent or corrupt act;
- (b) theft of funds, supplies or other assets;

- (c) maladministration or financial misconduct in handling or reporting of money, financial transactions or other assets;
- (d) making a profit from insider knowledge;
- (e) disclosing confidential or proprietary information to outside parties for financial or other advantage;
- (f) requesting or accepting anything of material value (free of charge or at a lesser price) from contractors, suppliers or other persons providing goods or services to UKZN, without proper disclosure in writing to the relevant line manager at deputy director level or above.
- (g) irregular destruction, removal or abuse of records and equipment;
- (h) deliberately omitting or refusing to report or act upon reports of any such irregular or dishonest conduct;
- (i) bribery, blackmail, secret commissions and or extortion involving UKZN employees in the performance of her or his duties;
- (j) abuse of UKZN facilities; and
- (k) any similar or related irregularity.

3. THE POLICY

- 3.1 UKZN will not tolerate fraud within the institution and will apply appropriate prevention and detection controls. In addition, all fraud will be investigated and followed up by the application of all remedies available within the full extent of the law. These prevention controls include the existing financial and other controls and checking mechanisms as prescribed in the systems, policies, procedures, rules and regulations of UKZN.
- 3.2 It is the responsibility of all employees and students of UKZN to report all incidents of fraud to her/his superior or to the Vice-Chancellor, or to the facility offered in terms of the Protected Disclosures Act.
- 3.3 All employees and students within UKZN are responsible for the prevention and detection of fraud.

4. REPORTING PROCEDURES AND RESOLUTION OF REPORTED INCIDENTS

What should employees or students do if they suspect fraud?

- 4.1 It is the responsibility of all employees or students to immediately report all allegations or incidents of fraud to their immediate superior or, if the employee has reason to believe

that his/her immediate superior is involved, to the next level of management. All superiors must report all incidents and allegations of fraud to the Vice-Chancellor or the designated representative.

- 4.2 Should employees wish to report allegations of fraud anonymously, they can contact the Fraud Hotline on the toll free number 0800203285 .

What should a member of the public do if they suspect fraud impacting UKZN?

- 4.3 UKZN encourages members of the public who suspect fraud impacting it to contact any of the parties and or utilise the mechanism listed in paragraph 4.2 above.

How will allegations of fraud be dealt with by UKZN?

- 4.4 The action taken by UKZN will depend on the nature of the concern. The matters raised may be referred to the:

- (a) Forensic Services department which will initiate an investigation into the matter;
- (b) external forensic investigators for detailed investigation; or,
- (c) South African Police Services.

The Vice-Chancellor may determine whether, in line with University policy, the staff member or student should be suspended

- 4.5 Any fraud committed by an employee or student of UKZN will be pursued by thorough investigation and to the full extent of the law, including consideration of the following:

- (a) taking disciplinary action;
- (b) instituting recovery of financial losses, including formal civil action;
- (c) initiating criminal prosecution by reporting the matter to SAPS or any other relevant law enforcement agency; and/or
- (d) any other appropriate and legal remedy available.

- 4.6 The Vice-Chancellor and the respective managers are also required to ensure that losses or damages suffered by UKZN as a result of all reported acts of fraud committed or omitted by an employee or any other person, are recovered from such an employee or other person if he or she is found to be liable.

- 4.7 The Vice-Chancellor or her/his delegated representative will, upon receiving a report of fraud from an external person, write to the person (unless the report has been made anonymously) making the report:

- (a) acknowledging that the report has been received; and
 - (b) informing her or him whether any further investigations will take place, and if not, the reason therefore.
- 4.8 UKZN accepts that those people, including employees who reported the alleged fraud need to be assured that the matter has been properly addressed. Thus, subject to legal constraints, information about outcomes of any investigation will be disseminated to them.
- 4.9 The Audit and Risk Committee will review, biannually, the matters reported and actions taken.

5. CONFIDENTIALITY

- 5.1 All information relating to fraud that is received and investigated will be treated confidentially. The progression of investigations will be handled in a confidential manner and will not be disclosed or discussed with any person(s) other than those who have a legitimate right to such information. This is important to avoid harming the reputations of suspected persons who are subsequently found innocent of wrongful conduct.
- 5.2 No person is authorised to supply any information with regard to allegations or incidents of fraud to the media without the express permission of the Vice-Chancellor and knowledge of those accused.

6. PUBLICATION OF SANCTIONS

- 6.1 The Vice-Chancellor will decide, in consultation with appropriate senior managers, whether any information relating to corrective actions taken or sanctions imposed regarding incidents of fraud should be brought to the direct attention of any person or made public through any means.

7. PROTECTION OF WHISTLE BLOWERS

- 7.1 The Whistle Blowing Policy is intended to encourage employees to raise concerns relating to specific matters (including fraud), without fear of victimisation.
- 7.2 No person will suffer any penalty or retribution for reporting in good faith, any suspected or actual incident of fraud.
- 7.3 Managers should discourage employees or other parties from making allegations which are false and made with malicious intentions. Where such allegations are discovered, the person who made the allegations will be subjected to firm disciplinary or other appropriate action.

8. APPLICATION OF PREVENTION CONTROLS AND DETECTION MECHANISMS

- 8.1 In respect of all reported incidents of fraud, managers are required to immediately review, and where possible, improve the effectiveness of the controls which have been breached in order to prevent similar irregularities from taking place in future.

9. CREATING AWARENESS

- 9.1 It is the responsibility of all managers and the overall responsibility of the Vice-Chancellor to ensure that all employees are made aware of and receive appropriate training and education with regard to this policy.

10. ADMINISTRATION

- 10.1 The custodian of this policy is the Vice-Chancellor, who is supported in its implementation by all managers within UKZN.
- 10.2 The Audit and Risk Committee, supported by the Vice-Chancellor and all managers of UKZN, is responsible for the administration and revision of this policy. This policy will be reviewed when deemed necessary in order to effect necessary changes.

Approved by Council on 15 February 2008