



**AN INVESTIGATION OF INTERNAL RISK CONTROL MECHANISM
WITHIN THE VARIOUS DEPARTMENTS OF ETHEKWINI
MUNICIPALITY**

By

ZINHLE PRETTY KHUMALO

Student Number: 20810184

A dissertation presented in fulfillment of the requirements for the degree of

Master of Management Sciences: Public Management


In the Faculty of Management Sciences

Of

Durban University of Technology

Supervisor: DR. LM Lekhanya

- PhD (UWC): Management; D-Tech (DUT): Marketing

Signature: 

Date: 29/08/2018

Date: 29 August 2018

DECLARATION

I, the undersigned, Miss Zinhle P. Khumalo hereby declare that the dissertation is my own original work and that it has not been submitted, and will not be presented at any other University for a same or any degree award.

Signed_____

Z. P. Khumalo

I certify that the above statement is correct

Signed_____

Dr. L. Lekhanya - Supervisor

Faculty of Management Sciences

Durban University of Technology

Durban

ABSTRACT

The central aim of this study is to investigate the current internal risks control mechanism within the various departments of eThekweni Municipality. The research has been conducted specifically in Durban, with regard to the eThekweni municipality senior officials and junior management staff. The major motivation for this study is to assist government's institutions especially the eThekweni Municipality to improve understanding or awareness within the department on activities affecting exposure to risk and to understand the barriers to implementation of effective internal risk management control mechanisms and strategies. A mixed method approach was employed and the analysis of data was done using data tabulation of themes.

The findings of the study revealed that, if the eThekweni Municipality were to improve their risk control mechanisms, all staff members should be properly trained and encouraged to be involved in all levels of the organization. The study also recommended that the eThekweni Municipality consciously improve on identifying organizational risk by applying risk management processes that involve risk identification, risk evaluation, risk control, risk financing and risk monitoring. It is recommended that this process be monitored throughout. Another recommendation of this study was that the eThekweni Municipality must improve on internal risk control processes that include organizing, dividing the institution into various areas for evaluation, developing a plan for subsequent action, conducting internal control reviews, analyzing the general internal control review, documenting the event, evaluating internal control and preparing a report on internal control. This mechanism should be implemented contentiously and to be monitored throughout. It was recommended that eThekweni Municipality implement the ISO 31 000 standards.

This policy is recommended because it assists the organizations to reduce the chances of risk and it will assist the eThekweni Municipality to effectively implement their internal control mechanisms. Areas of research include further research into the progress of implementation of strategies that can be employed to improve the internal control mechanism of the eThekweni Municipality and intentional follow up on the models for risk management in South Africa. There are more internal control strategies that can be discovered here and hence the study recommends further research particularly on risk internal control within government institutions.

ACKNOWLEDGEMENTS

- One day, I will define accomplishment using myself as an example, and I wish to say a big thank you to those whose shoulders I leant on when I couldn't do it all by myself. Writing this dissertation was a lonely and frustrating struggle and I would like to acknowledge, appreciate and thank various friends, who made it bearable and cheered me all the way to the end.
- I am indeed very grateful to Dr. L Lekanya for his endless guidance and support during this work; in spite of his busy academic schedule and other life activities, he still found time for me. He provided insightful comments that made the work better and gave me encouragement when the journey was thorny. I am highly thankful to him.
- Thabelo Khaphathe, I cannot express sufficient gratitude to you for your understanding, listening from start to finish, especially for encouraging me at those lowest times when I felt like quitting.
- The man above (GOD) I can never stop appreciating and praying to the man above my God when I felt like quitting I shouted your name and you listened and responded to prayers and I never thought that I will ever finish this dissertation. God I will never stop praising you, you have inserted my life on another level.
- Fikile Kubheka, my late mother I will like to acknowledge you, I never get enough time to spend with you until God called your name I know that wherever you are I made you proud thank you for being a great mother.
- Neli Ntuli my God grandmother I never got a chance to acknowledge when you were still alive I know that you will be proud for my achievements wherever you are. I cannot forget the love that you showed me, you were always there and encouraging my education I love you always.

DEDICATION

This research dissertation is dedicated to my special future children, late grandmother Josephina Nyandeni and Fikile Kubheka; to my special precious little sister Nomalanga Zwane; to my lovely partner Thabeleo Khaphathe. It is with your love, support, guidance and encouragement that I have been able to reach this goal.

TABLE OF CONTENTS

CONTENT	PAGE
DECLARATION	i
ABSTRACT.....	ii
ACKNOWLEDGEMENTS	iii
DEDICATION	iv
TABLE OF CONTENTS.....	v
CONTENT PAGE	v
CHAPTER ONE	1
1.1 Introduction.....	1
1.2 Brief Literature Review	2
1.3 Problem statement.....	2
1.4 Research aim.....	4
1.5 Study objectives	4
1.6 Significance of the study	4
1.7 Research questions.....	5
1.8 Limitation of the study	5
1.9 Delimitations.....	5
1.10 General outline of the study	6
1.11 Conclusion	6
CHAPTER TWO	7
2.1 Introduction.....	7
2.2 DEFINITIONS OF KEY CONCEPTS.....	8
2.2.1. Risk	8
2.2.2. Risk management.....	8
2.2.3. Definition of internal risk control	9
2.3 RISK INTERNAL CONTROL OF GOVERNMENT MUNICIPALITIES.	13
2.4. Internal risk control technique	15

2.4.1 Control Environment	15
2.4.2 Risk Assessment	15
2.4.3. Control Activities.....	17
2.4.3.1. Human resources risk control management.....	17
2.4.3.2. Financial management internal risk control.....	18
2.4.4. Information and Communication.....	20
2.4.5. Monitoring Activities.....	20
2.5 ENVIRONMENTAL RISK CONTROL.....	21
2.5.1 Waste management	21
2.5.1 Disaster management.....	21
2.5.1.1 Risk Assessment	22
2.5.1.2 Prevention or reduction of risk and disasters.....	22
2.5.1.3 Mitigation.....	22
2.5.1.4 Preparedness of emergencies	22
2.5.1.5 Response or relief to disaster	22
2.5.1.6 Recovery/rehabilitation - post disasters	23
2.5.1.7 Vulnerability	23
2.6 Benefits and importance of implementing proper risk management strategies.....	24
2.7 Policies and procedures that are in place to guide risk management.....	25
2.8 Methods, processes and procedures for risk management.....	30
2.9 Risk management process.....	32
2.9.1 Identify the risk	32
2.9.2 Risk analysis	32
2.9.3Evaluate risk.....	34
2.9.4 Treat the risk	34

2.9.5 Monitoring risk	34
2.9.6 Risk avoidance	35
2.9.7 Risk transfers	35
2.9.8 Risk financing	36
2.9.9 Risk management processes	37
2.10 Enterprise risk management.....	38
2.11 Strategic risk management.....	38
2.12 Conclusion	39
CHAPTER THREE	39
3.1 Introduction.....	40
3.2 Research design	40
3.3 Research objectives.....	41
3.4 Approaches to research methodology	41
3.5 Survey method	42
3.6 Target population	42
3.7 Sampling procedure	42
3.8 Data collection methods.....	43
3.8.1 Advantages.....	43
3.8.2 Disadvantages	44
3.9 Measuring instrument	44
3.10 Development of questionnaires.....	44
3.10.1 (Questionnaire for ordinary employee) Section 1: demographic details - Quantitative method (Closed-ended questions).....	44
3.10.2 Section 2: Quantitative method (Closed-ended questions).....	44
3.10.3 Qualitative method (questionnaire for senior employee) open-ended questions.....	46

(Section 1: demographic details)	46
3.10.3 (Section 2: Qualitative questionnaire)	46
3.11 Methods to avoid bias	49
3.11.1 Question bias.....	49
3.12 Data Analysis	49
3.13 Validity and Reliability	50
3.14 Conclusion	50
CHAPTER FOUR.....	51
4.2.1 Biographical Data of Respondents.....	52
4.3 QUALITATIVE ANALYSIS	73
4.4 CONCLUSION.....	82
CHAPTER FIVE	84
5.1 Introduction.....	84
5.2 Research Objectives.....	84
5.3 Summary of issues and major findings.....	84
5.4 Conclusions.....	86
5.5 Recommendations.....	87
5.6 RECOMMENDATIONS FOR FURTHER STUDY	88
Appendix 1.....	100
06 May 2016	100
6 th May2016	101
Head : E S.....	101
Appendix 2: Cover letter for the questionnaires	102
Appendix 3: Consent form.....	104
Appendix E: Chi-Square tests	128
Appendix F: Cross-tabulations	130

CHAPTER ONE

ORIENTATION AND OVERVIEW OF THE STUDY

1.1 Introduction

Identifying risk, and providing a sound internal risk control system where perils are put into minimal are the duty of an organization in order to attain a fulfilling corporate goals. This is a preventive measure to unscrupulous behavior for the purpose of guaranteeing an organizational effective management processes such as errors and omissions, frauds amongst orders that leave gaps or lapses for cheating or misappropriation. The study intends to investigate the effectiveness of current internal risks control mechanism within the various departments of eThekwin Municipality and thus, proffer strategies that mitigate risks to the findings of the studies.

Sadgrove (1996: 6) views risk management as a logical approach of subjecting organizational investments and earnings to identification, assessment and control of threats that may arise from different sources such as financial uncertainty, legal liabilities management errors, accidents and natural disasters amongst order. It is a concept that management at different levels within the organizational system strive to achieve at, and beyond the inception of any form of activity or task to avoid disorderliness that can be hideous ideally for the purpose which internal control is engaged (Fraser, Schoening, Karen and Betty, 2008: 233). Expanding on the same logic, not only does the management has huge role to institute in training their employees but a call to play where workforces are aware of event of occurrence which are happening around them mainly to ensure sustainability in a business for improvement to avoid loss of control where corruption are brought to minimum level.

The aim of the study will assist management to design, implement and maintain appropriate internal risk controls that will minimize possible occurrence of undesirable events as well as determining how to mitigate risks for the purpose of maintaining orderliness.

1.2 Brief Literature Review

Risk Management is defined as “coordinated activities to direct and control an organization with regard to risk” (Guide 73, 2009: 2). The original idea of risk management originated in the United States as an approach of curtailing business risk from escalation that causes untold damage to the business system in any corporate organization. Furthermore, in the 70’s, the extension of risk management spread into the United Kingdom and only became popular in South Africa in the late 1970s. This is because organizations were exposed to different forms of risk especially where the discharge of duty is involved, the effect of which hampers the goal achievement, dream realization and organizational developmental stages.

In fact, Valsamakis, Vivian and du Toit (2010b: 2) attest that many organizations experience risks in the course of their activities, the effect of which impact the result of their functions and their preferred overall plan. Risk management provides a framework for organizations to deal with and to react to uncertainty while acknowledging the fact that inconsistency tends to happen owing to environmental issues (Hopkin, 2012: 33). However, there is general consensus amongst risk management practitioners that attaining benefits from taking risk entails cautiously designed implementation of risk management methods in organizations. The successful implementation of risk strategies is hence necessary to be structured in a good design to aid risk identification to facilitate efficiency in all ramifications of organizational units.

In line with the views of the authors that this study aims at identifying the practical risk problems that are faced by employees and management in the departments of eThekweni Municipality pertaining internal risk control mechanisms, internal risk management processes and other risk management strategies that can be useful in various departments.

1.3 Problem statement

In this recent time, organizations are challenged by different types of risk such as loss of or damage to property, liability losses, personnel losses, financial losses and losses caused by interruption of public service delivery (Madhu and Brady, 2014: 124). As a result, the ability of the management to

deliver a substantial result can be detrimental to achieving mission statement of an organization in the absence of strategic planning regarding effective internal control. Although, organizations maybe prone to risk in each part of their operation. In this regard, what is more for the management and their employees is to be able to identify risk in order to ensure correctness of events by starting to keep risks at arm's length within a reasonable limits. In this recent time, organizations are challenged by different types of risk such as loss of or damage to property, liability losses, personnel losses, financial losses and losses caused by interruption of public service delivery (Madhu and Brady 2014: 124). Valsamakis, Vivian and du Toit (2010b: 2) attest that many organizations experience risks in the course of their activities, the effect of which impact the result of their functions and their preferred overall plan. As a result, the ability of the management to deliver a substantial result can be detrimental to achieving mission statement of an organization in the absence of strategic planning regarding effective internal control. Moloi (2014: 681) examines the disclosure of risk management practices in the top South Africa's mining companies on an annual or integrated report disclosure analysis. The study found that most South Africa's mining companies do disclose their risk management practices in line with the recommendations of the King III report on corporate governance; however, such disclosures are often lacking detail on actual practices and accomplishments could be enhanced.

Katuui (2015: 1) assess the impact of managing records in South Africa's public sector and found out that developments in the management of records with an emphasis on digital records in South Africa have not received much attention. Gutshwa (2016: 10) also investigate the risk culture in a South African government institution. It was noted that many government organisations have implemented risk management processes but it seems that, no tangible benefits have been realised from applying these processes. The reason for this might be that these organisations did not first embed a risk culture. This article assesses the risk culture maturity level of a South African government organisation.

In the views of the authors above, there is clear indication that risk management practices is essential to maintain proper effective governance in any respective organization irrespective of size, ownership or form whether private or public. It based on the aforesaid evidences mentioned by the authors that this study seeks to investigate the internal risk control mechanisms within the eThekweni Municipality.

1.4 Research aim

Bhattacharjee (2012: 89) alludes research aim as an exploration that display the degree at which a researcher intends to draw conclusions. The aim of the study is to investigate the current internal risk control mechanisms and strategies within the various departments of eThekweni municipality.

1.5 Study objectives

Akdemir, Karameşe and Arslan (2015: 3200) suggest research objectives imply action required to get research goals accomplishable. In order to make the aim of this study realizable, the following objectives were designed. These are:

- To establish the internal risk management control mechanisms and strategies that are in place in the various Departments of the eThekweni Municipality;
- To evaluate the effectiveness of the internal risk management control mechanisms and strategies of the eThekweni municipality;
- To understand the barriers to implementation of effective internal risk management control mechanisms and strategies
- To try and assist the Municipality with improving the understanding or awareness within the departmental activities affecting exposure to risk.

1.6 Significance of the study

The prime reason for the study was to identify gaps and contribute to the existing knowledge. The study was specifically undertaken after the researcher had noticed that the knowledge of risk management was not sufficient and hence the researcher also wanted to contribute valuable knowledge.

However, the main motive for this study was to assist local government institutions especially the eThekweni Municipality to improve understanding or awareness within the departmental activities affecting exposure to risk and to understand the barriers to implementation of effective internal risk management control mechanisms and strategies. The findings of the study will be published in a scholarly paper and the findings will also be made available within the eThekweni municipality.

1.7 Research questions

The key research questions that informed the study are:

- What are the internal risk management control mechanisms and strategies that are in place in the various departments of the eThekweni Municipality?
- Are the internal risk management control mechanisms and strategies effective in reducing risks in the Municipality?
- What are the impediments associated with the implementation of internal risk management control mechanisms and strategies?
- How can the Municipality improve its internal risks management control mechanisms and strategies?

1.8 Limitation of the study

The study was limited to the Durban area only in the eThekweni Municipality. Senior employees and their subordinates per department participated in the research interview. This is to curtail the cost implication in lieu of this study and also to enable easy accessibility of the target population without excess expenditure.

1.9 Delimitations

Simon (2011: 2) observes delimitations as the potential weaknesses that arises in the course of a study beyond the control of a researcher. For the purpose of this study, the limitation encountered in the course of this study is the unavailability of the superior workers, the effect of which is tantamount to their busy schedule as well as other staff who can contributed meaningfully in terms of supply of needed information that can help the study. In this regard, structured questionnaires were distributed to elicit the need data for the study. Furthermore, qualitative questionnaires were structured to the employees at superior level in-order for them to provide the in-depth information about international risk control mechanisms and in-order to check if they understood the procedures of risk. Also, quantitative questionnaires were distributed to employees who are the subordinates. The effect of this is to ascertain if ordinary employees were aware about what their senior managers formulate and implement.

1.10 General outline of the study

- i. Chapter one structures as an introductory aspect of this study as it gives a summary about the need for internal control as an instrument to initiate control as precautionary measure to maintain orderliness in the departments in eThekweni Municipality of KwaZulu-Natal. In addition, the chapter gives details the problem statement, objectives, delimitation of the study and rationale to study area.
- ii. Chapter two reviews the variable by giving a wide-ranging details on internal control and its sub-components especially on the importance and its applicability to ensure effective control within the organizational system.
- iii. Chapter three detail the research design and method that was initiated to carry out the methods, techniques as well as the instrument employed in conducting this research. The choice of research design is detailed as the study uses both quantitative and qualitative approach to elicit the need data through the use of questionnaire necessary for the conduct of this study
- iv. Chapter four gives an expression and analysis on the findings of the study.
- v. Chapter five addresses the conclusion and make suggestions to the findings and recommendations for the future study.

1.11 Conclusion

This section has provided an outline of this study by using the objectives, problem statement and the research questions as a pathfinder to actualize the purpose for which the study is undertaken. Also, the in-depth representation of internal control was explained in the background section of this study to give broader ideas particular on the need to reinforce the internal control system in the department of eThekweni Municipality of KwaZulu-Natal, In South Africa.

The next chapter focus on the reviews of the scholars on the internal risk control mechanism.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In recent decades, the changing environment has posed a threat to the value of the maximization process in organizations and systemic shock has altered the way risk was managed in the 1970s and 1980s (Gupter, 2010b: 130). Risk management has emerged as a separate discipline in the corporate world since the 1990s. Furthermore, the concept of risk management is not a new thing in management because it is a technique that aid risk reduction through safety, quality control and hazard education, alternative risk financing and insurance including self-insurance and captive insurance have been in existence for a long time. However, in this recent time, the growth of derivative markets has promoted the value of risk management in handling and managing risk. Kokobe and Gemechu (2015: 3) explain that the progress and failure of the organization depends on how the organization manages its risk.

Kummuthinidevi (2016: 600) states that statutory requirement plays an important role in controlling organizational risk and improve safety hence organizations are required to comply with the statutory requirement. However, in the management process, internal control plays an integral role in reformation that concerns the affairs of the organization. Amidst the roles impacted in the code of compliance, in particular, in employees' interpersonal skills are; enhancement of transparency, integrity and clarity of purpose, where people are able to behave with sense of decency in task performance. This is a promoter to commitment level, the ideological concept of which serves as base for moral behavior in the areas for which it is applied (Barnes, Mattsson and Sorensen, 2016: 286).

The literature review in this chapter solely depends on the internal control appliance as the variable of the study. To add to this, other components that make the said construct will be unpacked to have in-depth understanding of this concept and mainly, to establish facts needed for this study.

2.2 DEFINITIONS OF KEY CONCEPTS

2.2.1. Risk

Hopkin (2012: 14) describes risk as the probable event of occurrence that arises from a given action or inaction on something of value. The circumstantial event of incident may in somehow depend on intentional interaction with uncertainty. On the other hand, risk in the world of business may imply to mean the future uncertainty about the anticipated results or earnings. It a prospective state actualizing gain or loss on something worthwhile. The dimension of risk from financial aspect of the business can be classify into; operations risk, economic risk, basic risk, capital risk, liquidity risk, payment system risk, underwriting risk, interest rate risk, exchange rate risk, settlement risk, refinancing risk amongst orders. However, the reward of risk is profit. In the author's opinion, risk avoidance can be done through a preemptive actions such life assurance, insurance of properties, heightening of securities.

Ennouri (2013: 289) agrees a risk to indicate a casual event or a natural phenomenon that is triggered by internal or external vulnerabilities in the absence of any action to control or modification of circumstance. The successful programmes management demands the ability of the superior in the workplace to engage in proper planning in order to deal with any ambiguity if corporate goals were to be achieved. Nevertheless, a risk can either be a threat or an opportunity in nature. Conversely, the end result of risk is 'issue' which needed to be handle with due diligence with good strategy that enables good decision. In order to avoid any nasty surprises that may endanger risk policy objective, the author suggest that the superior or managers must have good understanding of risks on how to identify, manage, avoid, review risk as well as indulging in risks participation activities.

2.2.2. Risk management

Phuenngam and Na Ranong (2009: 34) note risk management as the structure and action of managing unwanted actions through the range of methods, policies, systems and action that involves planning, observing, monitoring and examination that uses different techniques of dealing with risk. It is a concept that paves way for development and recording of general modification on issues or performances relating to employees or management duties.

Young (2010: 22) posits risk management as the technique of identifying risk within any organization with the intention of coming out with the best effective methods of eliminating and minimizing threats. Therefore, risk management can be effectively managed by taking into consideration of the follow process of risk avoidance, risk acceptance, risk transfer, risk reduction, risk identification, risk evaluation and risk controls.

Wallace and McClure (2012: 2) concur that risk management is the inclusive and systematic method of dealing with risk. He also mentioned that the process of risk management plays an important role in risk identification, risk measurement and risk assessment. This process is specifically assisting in outlining risk, measuring and quantifying the actual frequency of hazard.

In conclusion, from the views of the authors above, it is imperative that people in the position of authority as well as their subordinates exhibit proper planning that facilitate effective internal control that maintain orderliness within the structure of the organization.

2.2.3. Definition of internal risk control

According to Kokobe and Gemechu (2015: 3), internal control is the utmost mutual word used to define the methods of the business procedures on how to realise its goals and objectives. It was acknowledged as the foundation of corporate governance. In their discussion they maintained that one of the greatest controls against the organisation risk and the significant controller of the organisation performance was having an exceptional internal control mechanism. Hence, the trustworthiness of fiscal recording is the main simple goal of the internal control structure. Controls are determined to inspire competence and helpfulness of the employee's day to day duties, which is the effective use of assets to enhance the business's objectives. Internal control encourages the obedience with the regulations, policies and rules. Hence, it is usually recognised that a worthy internal control structure may deliver sound guarantees that the organisation achieves its goals and objectives. It's anticipated that the fiscal performance of the organisation that has sound internal control mechanisms and remains improved compared to the performance of those organisations that do not implement internal control mechanisms.

Scholtz (2015: 79) explains internal control is the vital tool used in risk management. In order to eliminate, minimize and control risk, he defined internal control as an art that was established to grant organizational assurance. Arwinge (2013: 197) describes internal control as the process which an organization implements in order to improve its service delivery, accountability and meet

its objectives and it also provides reliable assurance. Committee of Sponsoring Organization of the trade way Commission (2014: 149) defines internal control as the method followed by an organization's board of directors, all employees and other individuals to grant a sound guarantee for attaining objectives of the organization by effectively following policies and procedures that control risk. According to Graham (2008: 19), internal control is regarded as important because it ensures that organizations are effectively and efficiently operating. It also ensures that organization methods such as policies and procedures are followed and hence it provides low risk and low disruption and provides value to stakeholders. He further explained that superiors are also expected to effectively allocate resources therefore internal control will play a major role in safeguarding organizational assets. Internal control also plays a major critical role in the detection and prevention of risk and other related matters which can be achieved through following procedures that are in place. Internal control also encourages accountability, accuracy and provides managers with a smooth operation within the organization. Financial resources of the organizations are also protected by keeping proper records.

Zulu (2006: 7) observes internal control as the method of planning and finding relevant means for ensuring that strategic goals and objectives of the organisations are achieved. He further explained that control within the organisations are normally exercised by senior managers which entails assessment, reporting system, auditing, time management agent, evaluation of performance, review and updating of organisational policies and control. He further mentioned that control involved five elements.

- Setting performance standards
- Developing ways of monitoring performance
- Assessing the real performance
- Comparing performance with the one that was formulated and implanted
- Undertaking necessary procedures where performance is not matching with the required standard

Bubilek (2017: 20) adds that internal control as the process that comprises of numerous important perceptions. Internal control entails a sequence of movements that infuse an organization's events. Internal control provides the instruments necessary to support the understanding of risks in the environment of the organization's goals and objectives and the major reason of the internal control

is to guarantee that these goals and objectives are attained while lessening the threat of disaster. They further mention that

- Operational internal control is the proof that the method of the city's spending and revenues are validly predicted and implemented
- Financial regularities with regards to the effectiveness, success, and economy might also include the verification of financial reports.
- Administrative internal control is a categorised control technique and organisational record connected to administrative procedures, strategies, guidelines, and aims that are developed by top management personnel. Its objective is to assure the validity, uniformity, and impartiality of organisational duties.
- Accounting internal control is the regulator of actions that is expected in assuring trustworthiness in the accounting registers and correctness in the preparation of accounting data, which is connected to the obedience of accounting procedures, providing for a better analysis of the accredited financing actions and resource protection.

STATE OF PUBLIC SECTOR INTERNAL RISK CONTROL IN SOUTH AFRICA

According to the paper written by Tsheletsane and Fourie (2014: 43), the Public Finance Management Act (P.F.M.A.) is regarded as the most effective control that plays a major role in government organisations. This Act was implemented due to that fact that it was recommended by most public financial "experts". This Act also plays a major role in improving fiscal control within the government institutions. Nevertheless, it has certain shortcomings. In its implementation it is sometimes theoretical and is lacking in the proper sanctioning of civil servants who have indeed contravened provisions of the Act. (PFMA) Consequently, it is essential that legislation controls the Public Service and Administration be brought in line with the Public Finance Management Act (P.F.M.A.), else the P.F.M.A. would remain toothless with regard to the sanctioning of contravening civil servants. The Public Finance Act (P.F.M.A.) must be read in conjunction with the South African Treasury Regulations and of course The Public Audit Act. These acts and regulations form the basis in terms of which Public Finance in Government and Provinces should be administered. (The third tier Local Government, or Municipal sector is being guided and controlled by the Municipal Financial Management Act (M.F.M.A.). Based on the literature stipulated by the PFMA, most municipalities do not comply with the ACT because there are many

cases of corruption reported. Public officials seem to be ignorant of the fact that they contravened the provisions of the Act. (P.F.M.A.). This is due to the fact that the punishment is not enough. It was the first report on corporate governance that was published in 1994 that entailed the corporate governance code for South Africa. This report also outlines the codes and standards for any organization and its stakeholders, and it does not only involve financial regulations, but it also involves an “integrated approach that involved all stakeholders”. This report inspires all organizations to adopt the code outlined in this report. The main principles that are outlined in this report are: balance annual report, affirmative action programmes, the requirement for effective auditing, regular board meetings, the organization’s code of ethics and appointments to the board and guidance on the maximum term for executive directors.

The King report II was developed after the King Report was revised in 2002. This report involved new issues such as sustainability. This report went on and specified that it would also be specific to all government organizations at National, Provincial and Local level. This report encourages all institutions to adopt and implement the principles from the code. There were main principles that were addressed by King report II: risk management, internal audit, accounting and auditing, integrated sustainability reporting and directors and their responsibility (King and King Committee, 2009: 14)

Following Marvin King’s interview, he felt that the King Report II was regarded as incorrect to include sustainability as an isolated chapter enforcing organizations to report on it excluding other factors. This report therefore integrated strategies, sustainability and governance. The King III report recommends that all institutions must produce an integrated annual report. The report included worldwide developments that include a risk-based internal audit, alternative dispute resolution, and shareholder approval of non-executive directors’ remuneration and evaluation of board and directors’ performance. It also went on to include IT governance, business rescue and Fundamental and affected transactions in terms of director’s responsibilities during mergers, acquisitions and amalgamations (The Institute of Directors in Southern Africa and the King Committee on governance, 2009: 3). There have been significant corporate governance and regulatory developments, locally and internationally, since King III was issued in 2009 which need to be taken into account. The other consideration is that whilst listed companies are generally applying King III, non-profit organizations, private companies and entities in the public sector

have experienced challenges in interpreting and adapting King III to their particular circumstances. The enhancement will aim to make King IV more accessible to all types of entities across sectors. The king report plays a major role in controlling financial matters within any organisation. The report recommends that government institutions implement those outlined, however it is still difficult for the municipalities to adapt those controls outlined by Marvin King in his reports. The emphasis on adapting King reports in Municipalities should be maintained in order to minimize rise in costs and ensure accountability in government institutions (The Institute of Directors in Southern Africa and the King Committee on governance, 2009: 16).

Ackermann (2016:1) maintains that internal audit functions in South African municipalities have been discovered to be one of the most valuable functions that are officially authorized to occur within any municipality in South Africa and is regarded as very effective in controlling the municipality's internal affairs. Van der Nest, Thornhill and de Jager (2008: 547) stress that accountability in all government institution plays a major in the internal control system. They mentioned that accountability originates from the South African constitution and hence it should be obeyed by all government institutions. Accountability should not be seen as the tool that should be only utilized for accountability only and it is not only utilized for control but all South African municipalities are held accountable to implement accountably. This literature revealed a very huge gap in South African municipalities since they fail to account on their fiscal matters due to the fact that corruption is still high hence it is suggested that all South African municipalities be held accountable as the constitution of South Africa recommended.

Domokos, Nyéki, Jakovác, Németh and Hatvani (2015: 8) maintain that there are certain different processes and procedures that are in place to guide all South African Public institutions in managing and controlling their financial issues. These processes were established under the influence of COSO 2009. Hence COSO standards plays a vital role in controlling government institutions and they should be obeyed as it is one of the standards that is in place. Risk assessment and risk management are also regarded as one of the internal control systems.

2.3 RISK INTERNAL CONTROL OF GOVERNMENT MUNICIPALITIES.

Fernandez and Arrondo (2005: 856) discuss the facts that authentication of documents, duties and key performance areas for employees are the main objectives of internal control. He added that all incoming and outgoing revenues should be noted. The segregation of duties and responsibilities

play a vital role in any organization. He suggested that organizations need to have a review and monitoring system in order to assure that the organization realizes its vision. Rao and Subramaniam (2008: 110) mention that risk management and internal control are an integral part of a firm's central business activities which are conducted to achieve its strategic business objectives. Jeremy (1999: 61) suggests that the public sector institutions need to adopt the private sector revenue control methods in order to enhance these institutions. He also said that the new control culture seeks to give more agility to administration and decision-making in the public sectors by building up accountability, simplifying procedures and upgrading public servants management skills. Agbejule and Jokipii (2009: 500) mention that it is not easy to develop internal risk control mechanisms without first identifying the potential risk. According to Länsiluoto, Jokipii and Eklund (2016: 219), a control situation needs a detailed thoughtful evaluation of an organisation's actions, hazards it expects and the controls it has put in place to control risk experience. This suggests a strong understanding of the organisation's procedures, governmental assets, arrangements, duties and tasks. According to mafunisa (2014: 1100), "a system of internal controls potentially prevents errors and fraud through monitoring and enhancing organizational and financial reporting processes as well as ensuring compliance with pertinent laws and regulations".

According to Yao, Yusheng and Bah (2017: 95), reporting on internal control enhances excellence of fiscal reporting and decreases governance glitches. Effective internal control will support government institution in the accomplishment of their performance and success goals and, therefore, inhibit damage of assets. Internal control contains five related mechanisms:

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

Financial Reporting Council (2014: 2) indicated that appropriate internal control mechanisms measures are very important in the event of safeguarding organisational resources and they provide a sound assurance in the following categories: effective and efficient process, internal fiscal control, and complying with the rules and principles of the organisation. According to Scholtz (2015: 86) there are 14 basic internal control functions that an organization may use:

- Relevant record keeping
- Processing and integration control
- Continuous reporting
- Complying with policies
- Relevant IT system controls
- Good audit committee
- Proper internal audit duties
- Proper risk management standards
- Current leadership culture
- Monitoring of performance
- Sound HR management
- Amended and up to date policies and procedures
- Clear action plans addressing any efficiency and
- Sound IT governance.

2.4. Internal risk control technique

2.4.1 Control Environment

This step involves honesty, ethical values, commitment to competence, management's attitude and in-service style organizational structure, assignment of authority and responsibility and human resource policies and practices. The organization clearly assigns performance areas to employees, and employees know what is expected of them. Action must be taken to eliminate health and safety risks as far as is reasonably practicable. If risks cannot be reduced, then implementation of control procedures is necessary, to reduce risks practically and realistically. A chain of command of controls should be developed and outlined to support the selection of mainly suitable risk control assess.

2.4.2 Risk Assessment

This step entails organizational goals and objectives, risk identification and prioritization, managing change, measurement of objectives, a budgeting system, long and short term goals and objectives planning, strategic planning for future needs is done well in advance of expected needs and considers various scenarios. Identification and consideration of internal risk factors,

prioritization of risk takes place here, and a risk management program is in place to monitor and help mitigate exposures. It also involves external advisors to supplement internal expertise. Mechanisms exist to identify and react to economic changes. Unit policies are implemented at this stage and senior authorities are responsible to monitor internal control systems and performance against the organization's internal control. Reviews are made of actual performance compared to objectives and previous periods for all major initiatives. Management analyzes and follows up as needed. Controls exist to monitor the accuracy and completeness of information as well as authorization of transactions. Equipment, supplies, inventory, cash and other assets are physically secured and periodically counted and compared to the amounts shown on control records. Training and guidance for asset custodians and segregation of duties are done. Arwinge (2013: 30) maintains that risk assessment is the "science" of knowing risk exposures with its frequency and its result when they take place. He mentioned hazards identification, hazard characterization (high, medium and low), appraisal of exposure and risk characterization as the components of risk assessment. He further explained three types of risk assessment as:

- Quantitative risk assessment

"Quantitative risk assessment is based on data which, while forming an inadequate basis of numerical risk estimation, nonetheless, when conditioned by prior expert knowledge and identification of attended uncertainties, permit risk ranking or separation into descriptive categories of risk. Hence quantitative risk assessment can assist risk management in priority setting and policy decision making"

- Semi Quantitative risk assessment

Semi quantitative risk assessment is the combination of a quantitative and qualitative risk assessment process. It may be shown by either numbers or descriptions and some numbers of risks will be presented.

- Qualitative risk assessment

Qualitative risk assessment are normally produced if there is sufficient risk information and they usually produce an extent of risk.

2.4.3. Control Activities

Control activities are those activities that are made to minimize risk that is derived from organization policies and methods that supervisors are able to direct and control the performance directed at achieving the organization's objectives. Control activities are also performed and carried out by the entire organization by following relevant organizational methods and hence they can be directive, detective and preventative. They involve a variety of instructions and manuals that could be computerized actions such as for example authorization, organizational performance appraisal and reconciliation. Segregation of duties is also part of control activities hence managers choose and develop substitute control actions.

2.4.3.1. Human resources risk control management

Graham (2008: 39) are of the same opinion with other authors that it is not easy to develop internal risk control before identifying the potential risk. Hence the ability to apply risk management techniques plays a vital role in determining internal risk control techniques. As a result, municipalities need to follow the methods of risk identification in order for them to be able to realize which risk needs to be control first. Salleh and Sulaiman (2015: 74) maintain that strategic human resource management is the tool that government institutions should adopt and apply to their human resources management, he further advised that managers and all other stakeholders should participate in the formulation of organizational strategy. This could provide a huge opportunity for the organization to be able to align organizational goals, objectives and strategies with the institutional objectives. He also mentions that human resource management strategies involve organizational training and system development. Thus the entire strategic management can be regarded as the organization's internal control system because by implementing these strategies organizations will be able to minimize and eliminate risk that may be experienced.

A performance appraisal system allows the public sector organizations to monitor the training and development of the required employee. A compensation system enables the best performing staff to be compensated based on their required performance standard and this system keeps the staff motivated and focused. Thus employees' aim is to achieve organizational objectives and hence in that way poor performance risk is eliminated. A well-functioning career planning system may also encourage employers to take more responsibility for their own development of the skills viewed as critical in the organization. Within the human resources management context organizations may be able to minimize and control risk should they apply strategic human resources as a tool for

internal control within any municipality. Yao, Yusheng and Bah (2017: 95) explain that the objective of controlling risk within the context of human resource management is to identify, assess and resolve risk at an earlier stage. “HR deals with the most valuable resource of the organization and it is crucial that it becomes a part of the total risk management. Once HR becomes a part of the risk management programme, it will allow the using of human capital to pursue the company’s strategic goals more systematically and help HR become a strategic business partner”. Human resources identifies risk by looking at **workforce planning: job analysis and job descriptions, performance assessment and the organization’s assurance rely on the well-established** performance assessment structure. Assessments should be undertaken continuously and the outcomes from the performance appraisal should be recorded accordingly, and remuneration should also be connected to real “performance”. Unsuccessful performance controlling structures will lead to a shortage of decent official and comfortable response from the senior staff and hence performance appraisal is the main function of HR. Quantifying risk allows HR to outline the risk within the organization and document it on a risk register in order to determine which risk needs to be considered to be high or low.

2.4.3.2. Financial management internal risk control

Lämsiluoto, Jokipii and Eklund (2016: 16) argue that the Committee of Sponsoring Organizations of the Treadway Commission (COSO) has published two recognized internal control frameworks. The first internal control framework is internal control integrated framework and the last one is COSO enterprise risk management. Thus within the context of financial management of any municipality, after risk has been effectively identified, the above two mentioned internal control mechanisms should be implemented to control and eliminate risks. COSO enterprise risk management framework (2004: 2) outlines that this framework was first established and recognized in 1992 as internal control. It assists institutions by offering integrated and effective guidance in controlling their organizational risk. “COSO enterprise risk management integrated framework consists of eight consolidated components: internal environment, objective setting, event identification, risk management, risk response, control activities, information and communication and monitoring. Therefore these components are integrated and required to be effective in controlling organizational risks.

Ayagre, Appiah-Gyamrah and Nartey (2014: 377) maintain that the internal control system made by (COSO) describes internal control as the procedure followed by any organization’s

stakeholders, including managers and directors that is created to attain the organization's goals and objectives. Those goals and objectives include:

- Reliability of formal reporting
- Compliance with applicable law and regulations
- Effective and efficiency of operations

Therefore an internal control system should be regarded as the method that is designed to achieve an organization's goals and objectives. Mary, Albert and Byaruhanga (2014: 67) outline five of the internal control systems as:

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

Hence the above-mentioned internal control system should be accepted and implemented in order to control organizational fiscal risks. Collins (2014: 140) explains that the shortcomings that were experienced in the foreign exchange research were caused by the lack of a foreign exchange internal risk control tool. As a result this proves that risk management control within any organization has a main impact and it is evident that should municipalities not apply internal risk control they may also experience major challenges of risks. Shamsuddin and Johari (2014: 302) express the view that within the government, institution accountability and risk control are definitely applicable to public organization actions. He further explains that since public institutions are dealing more with the public financial resources, they are expected to follow a certain "code of ethics" of government institutions.

Therefore, a predetermined code of ethics will be lawfully treated as the internal control system that will guide the behaviour of public officials in dealing with public funds. Modibbo (2015: 141) recognizes the critical part of internal control over financial reporting, auditing standards (AS) no. 5 that require public sector auditor to audit the consolidated governments departments financial statements, that the auditor is to provide. The auditor is also required to provide enough information on the audited financial statement and provide recommendations on those audited

financial statements. Hence municipalities should look at appraising auditing and implementing continuous reporting and provide relevant financial statements in time as a means of accountability. Financial statement can be regarded as the best internal control mechanism within government institutions.

Shabri, Saad and Bakar (2016: 240) opine that internal control is the tool that monitors organizations, they also emphasize that continuous reporting and producing financial statements are critical within any organization. Most municipalities are found non-compliant with reporting in time and they provide unpleasant financial statements due to fruitless expenditure. For this reason, it is imperative that employees and the auditors within the organizational system must have in-depth understanding of auditing standard and guidelines in order to fulfill effective internal control.

2.4.4. Information and Communication

Unit members receive relevant information regarding legislation, regulatory developments, economic changes or other external factors that affect the unit. Management reporting must be effectively done in order to produce a reliable information is evaluated and classified based on the level of integrity, confidentiality and availability. Individuals with access to information are trained to understand their responsibilities related to the information. Formal methods are used to communicate unit policies and procedures (e.g., manuals, training programs, written codes of conduct, and acceptable business practices) Information must also be formally shared with the external investigators.

2.4.5. Monitoring Activities

Monitoring transformation takes place inside and outside the environment, formulating their result on the institution's objectives, and amends outcomes that are reliable to the business's rule for risk control. Management periodically assesses employee attitudes, reviews the effectiveness of the organization structure, and evaluates the appropriateness of policies and procedures and effective risk. Also, managers must continuously evaluate and maintain effective monitoring of the internal control systems and policies that produces a reliable verdict (Kummuthinidevi, 2016: 611).

2.5 ENVIRONMENTAL RISK CONTROL

2.5.1 Waste management

Hwang and Yeo (2010:395) describe waste management strategy “as a strategic document drawn up for achieving the objectives of waste management and waste prevention and recovery, adding a limitation of the environmental impact of waste on human health and the environment”. Qian *et al* (2010:94) view that municipalities are advised to generate a suitable controlling structure that will assist environmental development and policy-making. They should also include all areas of the community to achieve environmental goals. Elsaid and Aghezzaf (2015:1086) define waste management as an important structure that involves an environmental control plan and it is the structure that outlines management duties, practices, measures, methods and assets for developing the method which will be able to control waste and conforms to the environmental procedures.

2.5.1 Disaster management

Busch and Givens (2013: 2) outline that the development of disaster management strategies must be undertaken before the event starts. Disaster management requires effective community-based strategies which will include programmes and measures to: prevent the severity of hazard impact, ensure the preparedness of the arrangements and of the community itself, provide an effective response should impact occur, provide for the recovery of a community affected by such an impact. Measures must also be in place to request and receive assistance from outside the country. Many authorities and organisations are routinely involved in dealing with incidents and disasters which arise when natural or technological hazards impact on our community. Therefore, this proves that within the context of disaster management it is also critical that strategies for controlling disasters needs to be in place before the event takes place and strategies for controlling those disasters also needs to be formulated. Disaster management strategy was established in order to provide favorable assurance to those individuals that are more highly exposed when disasters happen (Adetiloye, Olokoyo and Taiwo, 2016: 1172). This strategy’s objectives is to ensure vulnerabilities produced by disaster leading to movement, loss of homes, loss of livelihoods, departure of families or loss of social and traditional networks. The strategy will pay attention to prior disaster planning and after disasters have taken place.

Hemingway and Gunawan (2018: 499) describe disaster management as the planned methods that contain formulated strategies and implementation standards that are required to be beneficial for:

prevention of any dangerous hazards or threats of hazards, mitigation or reduction of risk of any disaster or its severity or consequences, capacity building including research and knowledge management, preparedness to deal with any disaster, prompt response to any threatening disaster situation or disaster, assessing the severity or magnitude of effects of any disaster, evacuation, rescue and relief and rehabilitation and reconstruction. Therefore, this implies that a risk assessment that guarantee an integrated plan that will control and manage disaster is necessary before any disasters are experienced.

2.5.1.1 Risk Assessment

Risk assessment is represented by three characteristic systems

- The identification of hazards expected cause disasters;
- The assessment of the risks of such procedures; and
- The evaluation of the social and economic consequences of the derived risk

2.5.1.2 Prevention or reduction of risk and disasters

Events aimed at delivering a defence or decrease a strength of a dangerous event so that it does not develop into and become a disaster e.g. reforesting an unbalanced grade to prevent landslides.

2.5.1.3 Mitigation

Procedures that were implemented before the disaster takes place assist to lower the result of disaster and the exposure of the community to disasters.

2.5.1.4 Preparedness of emergencies

Prior controls are implemented to detect, control, alert, and control disasters. Preparedness involves the actions that assists people in responding accordingly before the event takes place and after the event has occurred.

2.5.1.5 Response or relief to disaster

Actions are considered, which will eliminate instant adversity particularly on environmental issues such water, hygiene, people's well-being, maintenance, investigation, rescue and security of persons affected by disasters.

2.5.1.6 Recovery/rehabilitation - post disasters

This is a process undertaken by a disaster-affected community to fully restore itself to its pre-disaster level of functioning and which enables it to become even more disaster-resistant e.g. planting/harvest of drought resistant crops, storm-proofing essential community buildings, schools and clinics.

2.5.1.7 Vulnerability

Vulnerability is the situation whereby a community, assets or human beings, are exposed to any risk, hazards or disasters. It is the degree of resistance offered by a social system to the impact of a hazardous event. In turn, resistance depends on either resilience or reliability.

The International Federation of Accountant (2012: 92) confirmed that all organizations are challenged with facing risk, hence risk management and internal control mechanisms are important and essential parts of a risk management system and they play a vital role in the organization's achievements of goals and objectives. Therefore, it creates an attractive environment for stakeholders. Bozeman, Tech and Kingsley (1998: 34) emphasize that the universal risk dislike is the huge issue that obstructs organizational performance. Tchankova (2002: 38) added that risk management embraces the notion that organizations need to first identify their risk in order to acknowledge the risk that is required to be managed. Hence identifying risk will allow risk management to be more effective. Abor (2013: 27) confirms that hazards and threats may lead to negative experiences in organizations through financial loss and other loss of assets hence the most important tool that the organization can use is to introduce the insurance company. According to Gupter (2010a: 121) in recent decades the changing environment has posed a threat to the value of the maximization process in organizations and systemic shock altered the way risk was managed in the 1970s and 1980s. Risk management has emerged as a separate discipline in the corporate world since the 1990s. The concept of risk management is not so new because risk management techniques like risk reduction through safety, quality control and hazard education, alternative risk financing and insurance including self-insurance and captive insurance have been in existence for long time. However, more recently the growth of derivative markets has promoted the value of risk management in handling and managing risk.

2.6 Benefits and importance of implementing proper risk management strategies.

International Federation of Accountant (2012) acknowledges that both risk management and internal control could make a valuable contribution to organization to attain its objectives. They also describe risk management as the methods which institutions uses to safe guard themselves, assets, workers, customers and board members from harm by using strong risk management tools and it does not only focus on identifying hazard, purchasing of insurance and controlling risk. It is, and it should be, a continuous process. Hood and Smith (2013: 309) confirm that all institutions private and public have different hazards and threats that lead to the experience of different hazards and threats which may also lead to loss, damage and the interruption of the running of service delivery. Based on the literature consulted, it is argued that institutions need to implement a risk management framework, mechanisms and all other methods that are meant to identify the occurrence and harshness of the potential risk. The system must also be able to reduce and control the amount of risk. Previous studies on risk management reveal that it plays an important role in the organization by ‘improving” public service and performance in various ways. The research of the audit specialist, Gareth Kelly, on risk management contributes positively to organizations and it provides positive results. Risk management has become an important element for “strategic advantage” and it also provides a positive and high standard of performance in organizations. Risk management plays an important part in providing progressive outputs of objectives of the organization and hence it is hard to involve the influence of good risk management in solo. The research also shows that organizations have progressed well due to complying with internal control.

Mary and Arm (2009: 9) outline some of the benefits of applying risk management as it eliminates unauthorized organizational risk and enhances operational loss. It controls and tracks their risk and promotes risk management actions. It also promotes the processes of obtaining organizational goals and objectives and enhances the philosophy of clearness and clear risk possessions, implanting duties to achieve working risk into present management methods and improving consciousness of operating risk which encourages risk related conclusion results. Stan-Maduka (2010: 90) maintains that risk management is the key to assisting and promoting organizations to achieve their goals and objectives. It ensures that organizations effectively implement formulated policies, procedure and methods on risk management, and it also ensures that the organization determines methods and procedures that it needs to utilize in identifying all potential negative issues that might affect the organization and describes ways of mitigating those issues. Hopkin

(2012: 38) points out that risk management steps assist in knowing the institutional goals and objectives by outlining and examining organizational risk to find out which risk has the greatest potential.

According to Bless, Higson-Smith and Kagee (2006: 34) risk management provides assistance from early identification to determine which risk has a negative influence on the organization to realize its objectives. He further explained that risk management members must identify risk and recommend strategies that deal with risk. He further explains that the common strategy that is recommended to control risk is internal control. Risk was discovered to be capable of destroying many of the organization's activities such as operation, technology, objective, goals and strategies. Hence one of the board members' duties is to assess internal control and it is regarded as critical. On the other hand, risk managers are accountable to report on internal control and declare that internal controls are effective and doing what they are supposed to do. Picket (1999: 101) states "This is basic internal control at its best; agreed roles and responsibilities, documentation that is verified, a record of income and accountability, segregation of duties, a review and monitoring committee, custodial security and frequent checks. Over and above this, is a key objective of saving, to buy fireworks?"

2.7 Policies and procedures that are in place to guide risk management

Domokos *et al.* (2015: 9) mention that there are standards and procedures that are set to deal with risk management. The ISO31000 (2009:9) policy outlined that if an organization adapts the policy, it will assist the organization in reducing the chances of risk and help any organization achieve its goals and objectives and aid in the smooth running of the organization. The policies will further assist the organization to identify, assess and manage risk effectively. ISO, ITC and UNIDO worked together in order to consolidate one quality policy that will assist organizations in realizing their goals, the ISO31000 was developed to assist all organizations to align their risk standards with the international standards. This policy requires both privates and non-private organizations to identify and know their risks that are most important. Organizations need to identify risk and align them with the ISO 31000 in order to achieve their objectives effectively. Chapter one of this policy involves planning which implies that action must be taken then checked which means that implementation must be done. Chapter 2 involves mandate and commitment, chapter 3 designing framework for managing risk, chapter 4 implementing risk management, chapter 5 monitoring and reviewing the framework and chapter 6 includes regular improvement of framework. This policy

entails that the organization must formulate, implement, monitor and continuously assess risk. The standards of the organization must be formulated and implementation aligned with the ISO 31000. It further stipulates that the organization may also implement risk management based on:

- Formulating proper strategies
- Implementing exactly the formulated plan
- Assessing if the entire formulated strategy is doing what it meant to do - is it achieving objectives based on risk management?
- Amend any changes that were discovered to be ineffective during the monitoring phase
- The entire strategy to be evaluated to check if their strategy is effective in terms of risk management and if possible alterations to be made for a better result

The policy further stipulates that to follow risk management process steps can improve organizational risk. The step includes establishing context, identifying and analysing risk and evaluating and treating risk. Hopkin (2012: 56) outlines that Australian standards AS 4360 (2004:90), ISO 31000 (2009) the ERM version of the COSO standard and British standard BS 3100:2011 all play a vital role in risk control and he stipulates that the standards set out the approach on how to manage risk, identify critical frame work for risk management controls and stipulate common risk management process that assist organizations to identify risk. Based on these standards, COSO of ERM was identified as the best standards in risk management - it consists of both risk management and internal control. Hence these standards might be best recommended to be adapted by the municipalities.

Salleh and Sulaiman (2015: 75) mention that safety and “core skills” were recommended as the effective and the most important instrument of risk management because they contribute more to the organization’s achievement. He further explained that the board of directors and risk management personnel need to be well skilled and qualified in the field of risk management. (The public service commission) stipulates that the constitution of South Africa assigns the public service commission the responsibility of observing and helping with the maintenance of a high standard of morals and ethics in the public institutions, based on the strategic planning of the public service commission 2001/02 which includes promoting awareness amongst senior employees and in utilization of risk management tool as their daily activities, continuously implementing current helpful actions to guarantee the obedience with the productivity and time requirements outlined to

be approved, strategic implementation and work plans. Fraud and dishonesty must be avoided. Risk management in designated provincial government must be regulated. Gaps based on risk management application and recommended corrective measures must be outlined.

The Australian Standard (2003: 67) endorses the notion that organizations, private or public, must determine a strong risk management structure that will identify risk, assess risk, monitor risk and control risk also informing stakeholders on their risk profile. Risk management standards were pushed in the Australian institutions and it was updated twice and recommended as very effective in managing risk. Current auditing standards include general statements such as: “The division of COSO model and USA SAS 78 and Australia 402 (post Dec 2005) outlines that control environment, risk assessment, monitoring, information and communication and control procedures are required standards as mentioned by (Sharma 2006: 58). According to Harris (2000: 147) employees have had responsibilities under health and safety legislation (health and safety executive) to ensure that employees are protected by having a safe working place in which to carry out their duties. Individuals to have their responsibility under this legislation to ensure that no act or omission on their part lead to an unwanted incident. In 1992 the introduction of the Health and Safety Act (regulations health and safety executive 1992) requires employers undertake a formal written risk assessment of the activities of the organization, including among other aspects, significant hazards, manual handling arrangements and control of harmful substances.

Valsamakis, Vivian and du Toit (2005: 112) emphasize that the statutory requirement plays an important role in controlling organizational risk and improves safety and therefore organizations are required to comply with the statutory requirement. It further stipulates that risk management personnel must always be updated and educated regarding any changes within the safety requirements and should they not comply, they will be charged. They mention that there are three types of programmes that were specifically developed to manage risk, namely, the mine safety management system of the chamber of mine (MSMS), the international mine safety rating (ISR) and the national occupational safety association (NOSA) programme. They stipulate that NOSA was previously established in Canada during the year 1951 by the accident prevention fund of Ontario. NOSA claimed accident funding from the accident fund. It was noted that in South African organizations, NOSA became more successful in controlling risk such as loss of assets, injury on duty etc. On the other hand, the Occupational Health and Safety Act (OHSA) was

established to protect and safeguard employees during work time. This act compelled specific ministers to set out “standards” (NOSA) and also outline and enforce safe responsibilities of employees. The features of risk management standards outlined that most risk management standards established were IRM standards, ISO31000, British standards BS 3100 and the (COSO ERM) framework. It further outlined that (COSO) is also most effective in assisting the organizations to ascertain its goals, objectives and strategies sets by organization, (COSO ERM) framework has three elements that effectively represent the organization which are depicted in a form of a cube. The first dimension consists of interrelated steps of internal environment which include, objectives settings, event identification, risk assessment, risk response, control activities, information and communication, and monitoring. The second dimension includes strategic planning, operations, reporting and compliance. The last dimension is made up of the subsidiary business unit, division and entity level.

According to section 216 (1) (c) of the constitution of Republic of South Africa 1996 the national regulator needs to determine procedures for transparency and expenditure, control in all municipalities of government by determining common treasurer rules and standard on their own control environment obeying with governance including proper control within the institutions, institutional culture, policies, strategies and the operation of its institution with stakeholders. Internal auditors play a role in assisting government to improve controls and eliminate risk. Section 165 of the (MFMA) needs each local government to have its own internal audit department and therefore the duties of the local government is to consolidate risk-related audit strategy and internal audit programme annually and it must present findings to the audit commission for internal audit plan. The internal auditor is also responsible for providing advice to the accounting officer and hence the internal auditor is required to highlight the following on his report:

- Internal audit
- Internal control
- Accounting procedures and practices
- Risk and risk management
- Loss control
- Obedience with this act, the annual division revenue act and any other obedience revenue
- Perform any other responsibilities that might be assigned to it by the accounting officer

According to Aikins (2009: 23), the South African Medium term budget statement determines standards and procedures for maintainable public revenues and controlling risk exposure and vulnerability to economic and financial risk. The King report II on cooperate governance regulates features of good cooperate governance such as self-control, transparency, self-governing, accountability of duties, fairness and social responsibilities. The King report II on cooperate governance mentions that risk should be controlled in an incorporated way and therefore the duties of the board are to:

- To implement all strategies, processes and mechanisms of risk control that will eliminate identified risk in order to make sure that organization attain its objectives.
- Implementing risk mechanisms, strategies, procedures and policies
- Involving institutional risk on how they have been identified and
- Assessing effectiveness and corrective measures to be implemented.

According to the Municipal Systems Act, 2000 (Act No 32 of 2000) it talks about the objectives of local government “to provide a local principle for core principles, mechanisms and processes that are necessary to enable the public sector to move progressively towards the social and economic upliftment of stakeholders and ensure access to essential services that are affordable. Section 192 of the Constitution of South Africa mentioned that as documented in section 195 (1) of this constitution, it is applicable to all public institutions and organizations and that they should obey these rules and standards and that risk must be eliminated based on the standards outlined. The Systems Act Section 50 (2) mentioned that local government should focus and work on accomplishing its objectives as outlined in the constitution and hence Section 50(2) of the constitution went on and outlined the objectives that must be prioritized which they derived from section 50(1) of the constitution as follows:

- Delivery of democratic and accountable government
- Providing services in a suitable way
- Providing of socio-economic development, and a safe and healthy environment and
- Community involvement on local government

According to the white paper on transforming service delivery of 1997(Notice No 1459) which is commonly known as the Batho Pele principles which was imported from the Sotho language that actually means “people first”. It further explained how public services must be rendered and how

risk must be eliminated and controlled. Section 1.2.12 of the white paper on the Batho Pele principles emphasizes that people must be prioritized which means that institutions should put people first in whatsoever they are doing and relevant strategies that is aiming at minimizing risk should be in place in all organizations. The White paper on transforming service delivery (1999: 57) therefore highlights that municipalities need to prioritize and implement all these stands as their internal risk control mechanism within each department, thus it is evident that potential risk may be easily be eliminated and controlled.

2.8 Methods, processes and procedures for risk management

According to Crosstalk (2005: 89) risk aversion, with organizational strategy, the organization needs to know their objectives and how they intend to realize these hazards that should be controlled. They need to be prioritized and organizations need to consider a risk management process that includes formulating objectives, identifying risk and assessing risk. The action plan for controlling risk was also recommended which also involves minimization, transfer or avoidance of risk. Organizations also need to document all identified risk, assessing and reporting the improvement. Visser and Erasmus (2008: 59) maintain that there are four elements of risk management namely risk identification, evaluation, control and monitoring. Valsamakis, Vivian and du Toit (2010a: 89) are of the opinion that, within the process of risk management, risk identification is known as the most critical step. He explained that previously risk identification has been neglected in most research and thus it is essential that management develop systems to monitor undesirable conditions until they become effective. Procedures should also be implemented which must seek to prevent recurrence of risk. It was also suggested that it is necessary to utilize documentation and reporting systems to keep problems under management surveillance until the defect is corrected or the problem solved. Hence detective controls, compensating controls, and constructive controls are more effective to manage internal risk.

According to Sommer, Trieschmann and Hoyt (2005: 189) there are sources of risk that need to be considered when identifying risk. He mentioned that the main focus of sources of risk is on pure risk which includes property risk, liability risk and life, health and loss of income risk. According to Valsamakis, Vivian and du Toit (2000: 78), before any consideration can be dealt with, it is important to first consider risk identification by discovering sources of risk within the organization. Macro risk identification comprises of an assessment which can be aimed at determining risks that

are usually handled by the insurance, that is, those risks which provide an increase to: loss or damage to assets, the significant losses which arise from such are losses due to damage, legal liability claims, losses suffered by personnel and pure financial losses.

According to Bastaminia, Rezaei and Dastoorpoor (2017: 272), risk identification is the most critical stage of the process of risk management. The emphasis was on risk managers that make decisions on risk identification. They should be more conscious of the issues that may cause risk, the reason of identifying risk to make the organization be well informed about any potential risk that might arise and could affect the organization and act according to the identified risk. Rasmussen (1997: 23) emphasizes that risk identification of the risk management process is the main phase for the decision makers (risk management personnel) in that they will be involved in the planning of identifying which accident may spread. Visser and Erasmus (2008: 32) outline that in order to identify risk, it is recommended to conduct a research on risk using a survey method of collecting data by structuring a risk discovery questionnaire which deals with all assets of the public institution, investigate and analyze data collected from risk discovery questionnaires, perform follow up checks of the day to day function after finishing the survey. The superior should perform a schedule and periodic checkups.

In the context of operational risk management, Young (2010: 67) has the same opinion as other authors that operational risk management is the methodical way of implementation of risk control procedures, rules and relevant policies. He also highlighted the necessary processes involved as risk identification, risk evaluation, risk control, risk financing and risk monitoring. He went on and explained that risk management control is all about eliminating risk, minimizing risk and avoiding unnecessary loss of organizational assets. Regarding risk control the emphasis was that every organization should have different types of risk control mechanisms in place such as preventative controls, detective controls and contingency controls. Toth and Sebetyen (2014: 510) are of the opinion that it is important to describe organizational risk by applying the risk management processes of risk identification, quantitative or qualitative assessment of the documented risk, risk prioritization and response planning and risk monitoring. It does not matter which process of risk is utilized. An organization may utilize COSO ERM process to identify risk or may also use an older version of risk identification but he suggested that risk management process must be wider in the sense that it should involve the entire organization to participate in the implementation of

risk management. The process of risk identification must be carried out by risk management professionals.

2.9 Risk management process

2.9.1 Identify the risk

Rodrigues-daa-Silva (2014: 943) view that risk identification can be useful in outlining something beneficial or a threat to an organization hence those can be achieved by conducting a SWOT analysis. They maintained that some of the strategies of risk identification are consultation of possible risk sources, previous risk incidents like fraud, risk assessment situation and documentations based on risk, audit reports, and researching previous conduct regarding risk. He further mentioned that risk may also be identified by involving people to be questioned about any risk that they experience during working hours. Some of the risk identification methods include brainstorming or suggestions, risk research questionnaires, organizational analysis studies will focus on internal risk control methods and external organizations that might influence the internal risk evaluation conferences, incidents investigation, risk research and monitoring and “hazard operability” research.

2.9.2 Risk analysis

This stage includes the involvement of acknowledging the origins of risk and threat. The result and probability to estimate essential risk that need control are determined. This stage includes outlining the event risk control and determining how those controls will assist in achieving risk reduction. Risk data collected may be both qualitative and quantitative hence the data collected maybe required to be analyzed in the form of graph, matrix or chart to give a clear understanding of which risk are to be priotised. In this form of describing risk, it will be useful to understand the frequency of the risk and hence the result obtained from a matrix or graph will assist in understanding which control can be introduced. The matrices will outline the level of the risk.

Example of the risk matrix

Significance		Consequence				
		1	2	3	4	5
		insignificant impact	Minor impact to small population	Moderate-Minor impact to large population	Major impact to small Population	Catastrophic –major impact to large population
Likelihood	1	Low	Low	Moderate	High	High
	2	Low	Low	Moderate	High	Very High
	3	Low	Moderate	High	High	Very High
	4	Moderate	High	High	Very High	Extreme
	5	Moderate	High	Very High	Extreme	Extreme

Source: Berg (2010: 98)

2.9.3 Evaluate risk

Evaluation takes place after risk analysis. This stage assists in making comparisons of the previously documented risk. “When using risk matrices, this tolerable risk is generally documented with the risk matrix. Should the protected risk be greater than the tolerable risk then the specific risk needs additional control measures or improvement in the effectiveness of the existing control. Risk managers are tasked to make decisions on whether the risk is acceptable or not based on looking at whether the risk is very low and it does not cost the organization too much or an action is not there to deal with it. Since managers play a role in determining whether the risk should be accepted or not, should they decide to accept it they must do so but continuously monitor the accepted risk.

2.9.4 Treat the risk

If the level of risk has been determined as a risk that has a low level, managers must recommend cost effective ways of treating the accepted risk. The risk treatment options include, risk avoidance, risk reduction, transfer and risk acceptance. Risk treatment is the procedure whereby risk management experts recommend and implement ways of controlling risk within the organization. Hence risk can be treated by risk elimination, risk transfers and risk minimization. The process of risk treatment must involve implementation of effective internal risk control mechanisms, complying with internal risk control legislation and effective use of organization resources.

2.9.5 Monitoring risk

It is important that risk must be reviewed and examined and be monitored continuously. This will assist in determining new risks and updating identified risks, which involves determining the result of the risk treated. Should there be any failure new control must be effectively introduced, evaluation conducted in terms of the legislation and it must be done every five years. The monitoring process should be conducted continuously through risk reporting procedures, through risk audit strategies and through risk performance compliance standards. According to Williams, Smith and Young (1998: 98) risk control tools and techniques can be arranged as, risk avoidance, loss prevention, loss reduction information management and risk transfer (Berg, 2010: 189).

2.9.6 Risk avoidance

The other way of controlling risk is to avoid the activity that produces high risk probability by not performing or approving services associated with it. Risk avoidance is the effective way of eliminating risk because once risk has been avoided the organization will be free from risk experiences. Toosarvandanni, Modiri and Afzali (2012: 17) mention that risk avoidance is the process of avoiding a risk that has high quantity of risk within the organization and it is less important. They further explained that, risk may be avoided by either using another working process or procedure to change previous working methods. If the risk is too high the organization may consider stopping such services but it may be difficult stopping services that have more benefit towards the organization and hence the management needs to make a careful decision regarding risk - complete stoppage or accepting risk to harm more people. According to Verbano and Venturini (2013:187) the context of decision to avoid also may make avoidance impossible. A risk does not exist in a vacuum and a decision to avoid risk might actually create a new risk elsewhere or enhance some existing risk. Lee, Workman and Jung (2016: 3) outline methods that maybe used to eliminate risk

- By using safety measures examples gloves and protective shoes.
- By not allowing staff members that have poor driving report to drive organization cars.
- To ensure that assets of the organization are not left un-attended and exposed to theft and more security systems to be installed to safe guard assets.
- By ensuring that damaged equipment are repaired as soon as possible to avoid risk.

2.9.7 Risk transfers

Risks that seem to be carrying a high degree of risk, may be transferred in a form of company insurance or leased to another organization. There are three types of risks transfer:

- **The transfer of activity to another organization**

Risk may be transferred to another organization that is well equipped and are specialist in providing same service. Joining a pool is when risk is transferred to an insurance company.

- **The legal assignment of the financial losses to another organization**

It is when risk occurs to another organization such as for example, insurance. According Gurenko, Itigin and Wlechert (2013: 2) to risk transfer is in reality, the transferring of duties and liability for

losses to the next organization through a form of contract, the most familiar example of risk transfer being insurance, which lets an organization to pay a small premium in exchange per month for security against vehicle accidents, theft, or damage to property, employees disability or a variety of other risks.

- **Loss reduction**

Tools that can be used to reduce loss:

- 1. Reduction through safety and security measures**

This involves the utilization of hard risk measures, security and procedures, for example by installation of powerful security alarms, bars and locks that were made to reduce risk and detect risk. Procedures play a role in reducing loss by following outlined procedures in the work environment.

- 2. Reduction through organizational planning**

This involves organizational planning involving educating the staff about organizational risk, educating employees about the causes and prevention of risk. Educational planning may play a vital role in changing the staff's attitude to risk and the way they perceive risk. Duplication of delivery products from suppliers may also reduce contingency risk within the organization. It could be much more important to minimize the possibility of risk after the occasion has been happened. The above loss reduction methods are all important even though financial expenses are involved.

2.9.8 Risk financing

Risk financing is very important in risk management hence risk management is incomplete without risk financing.

- **Risk retention and assumptions**

The organization needs to decide how much risk they are willing to assume or keep. When the organization is prepared to keep the risk this will clearly define that it is also prepared to keep the risk that might arise, in other words risk retention and assumption should be viewed in the context whereby the organization has no insured risk and no transferred risk and therefore some of them are happening without knowing of others being planned for. Lakis and Giriūnas (2012: 145) opine

that losses that are not financially covered are known as “retained losses” and it happens when the risk cost is disregarded or when the risk has been quantified and examined but the decision has been taken not to finance it externally.

- **Unexpected retention or assumption**

Unexpected retention and assumptions normally occur through carelessness and unawareness. It is the unforeseen assumption it is regarded as an “unfunded or non-deliberate” risk retention which might be a breakdown in obtaining any helpful or purposeful act to substitute for the financial result of a risk. An unexpected assumption can then be the effect of the risk supervisors having a poor knowledge of the implication of certain actions taken. According to Renner, Schneiderbauer, Pruß, Kofler, Martin and Cockings (2018: 470) various risk retentions engage the target of financing losses as they take place. Except involving any forward funding to finance those losses should loss happen, it is financed through existing income.

2.9.9 Risk management processes

Cagliano, Grimaldi and Rafele (2015: 232) argue that risk mitigation is the process whereby risk managers aim to minimize identified risk within the organization. The process of mitigation involves: risk assumption when the organization decides to accept the risk and carry on with its services, risk avoidance when the organization decides to eliminate risk by totally stopping performing duties that carries a high amount of risk that could cause high damage, risk limitation when the identified risk is controlled by implementing risk control measures that will deal with risk to minimize and control risk, risk planning when the organization formulates and implements actions that are intending to manage and control risk, research and acknowledgement when the organization conducts relevant research based on risk management and acknowledge such risk that need to be dealt with and risk transfer when the risk carries a high degree of risk and the organization decides to transfer the risk to another organization in the form of reducing risk – a good example will be the insurance company.

Risk management strategies as suggested by Stoneburner: when vulnerability exist policies, procedures, and control mechanisms must be implemented immediately, that is, aiming at minimizing the potential of vulnerability being experience. When vulnerability can be exercised

and loss is too great, formulate principles that promote and prevent the amount of risk and “attack” by minimizing the potential risk.

2.10 Enterprise risk management

Li, Wu, Ojiako, Marshall and Chipulu (2014: 2) describe enterprise risk management as the method, effected by an organization’s board of managers, executives and other employees, practical in strategy formulation and enterprise. It is intended to discover possible actions that might influence the organization, and handle risks to be contained by its risk appetite, to grant a realistic guarantee about the accomplishment of organization objectives. Bromiley, McShane, Nair and Rustambekov (2015: 265) propose enterprise risk management as the method by which a business identifies, evaluates, manages, develops, finances and observes risks from all origins with the intention of overcoming short and long term goals to its shareholders vision, it mostly focuses on the organizational strategic goals and objectives that will identify the origin of risk and come up with a systematic plan that will finance and reduce risk.

Beasley, Branson and Pagach (2015: 7) note enterprise risk management is a procedure, resulting from an organization’s panel of administrators, supervisors and other employees, functional in strategy formulation and thorough the enterprise, planned to identify possible measures that may influence the organization, and control risk to be surrounded by its risk desire, to present rational guarantee concerning the accomplishment of the organization’s objectives. Enterprise risk management is defined as the strategic organization regulation that assists the organization in achieving its objectives by concentrating on the entire range of its risks and controlling the inclusive impact of such risks as an interconnected risk collection.

2.11 Strategic risk management

Dionne (2013: 2) views strategic risk management as the situation whereby an organization identifies its risk to minimize the threat in the way of meeting organizational risk. The organization outlines its weaknesses and strengths in order to understand which risk needs to be managed strategically. He further explained that there are three strategic risk analysis approaches: defining the objectives, brainstorming risk and characteristics according to the SWOT axis, calculating possibilities and consequences of risks and combining risk with characteristics. Schmit (2016: 27) adds on to identify the strategic plan of risk management as risk identification, risk response, risk measurement, and risk monitoring.

2.12 Concluding summary

Based on the literature review it is clear that no one will ever determine which risk internal control mechanisms are in place and which ones need to be installed. Hence the literature has revealed that organizations need to first identify their risks by using relevant strategies such as advanced processes of identifying risk. This will provide an idea of which risk has the severity and prioritization of those risks to be recognized. Risk management plays a vital role in every organization and hence an experienced risk management team is required to manage organizational risk. The literature also revealed that there are few studies that have been conducted on internal risk control. Risk management should not only be seen in the context of risk management. Risk can also be identified by looking at risk in relation to the strategic manner of the organization and aligning risk with the strategy of the organization. Enterprise risk management also plays a vital role in the identification of potential risk.

Hence risk management, enterprise risk management, strategic risk management and risk internal control are interrelated and are considered the best in the entire risk management environment. It was also recommended that the internal risk control system is the tool that must be used by all organizations as it plays a critical role in ensuring efficiency and accountability are effectively controlled. It also plays a vital role in detecting and preventing risks such as loss, theft and other related organizational risks. It was also noted that internal control and risk management are both related and form an integral part of risk management, and they are both considered to be useful in eliminating and controlling risk. COSO framework standards and policies are also noted and recommended as one of the internal control strategies and mechanisms that need to be implemented for the purpose of managing risk.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This study utilized a mixed method approach because of its effectiveness in generating rich data. Dawson (2002: 87) defines the mixed method as the combination of both qualitative and quantitative data in order to make sense of the results and that data is collected through descriptive and numeric means, respectively. Trochim (2006: 56) is of opinion that the combination of both open-ended and closed-ended questionnaires is when research questionnaires begin with multiple choice questions where there is a small box to tick for the suitable answer and then it is followed by an open ended question where the respondents are expected to explain and describe answers in detail. The study utilized both closed and open ended questionnaires.

Kumar (2005) made it clear that it is unethical to conduct the study without seeking and obtaining informed consent from the respondent. It is also unethical to gather data from the participants without his/her consent. Informing consent means that the topic and kind of information required are clearly explained and the disadvantages and advantages of the study are explained and how the respondents are expected to participate in the study. In addition, this study has a consent letter to seek permission for doing research with the respondents. Dawson (2002) has assured that under no circumstances the information provided by a respondent be distributed to anybody else for any purposes which are not connected to the research. Hence, this study has ensured that the information gathered was not shared with anybody else that was not connected with this study and confidentiality and anonymity of respondents were remained confidential all the way. No personal details of participants will be taken to ensure confidentiality.

3.2 Research design

According to Blanche and Durrheim (1999:29) research design is known as the systematic planned structure that functions as the linkage in addressing research problems and how the research can be executed to collect data. Research designs are the strategies that guide “the arrangements of conditions for collecting and analyzing data in the manner that aims to combine relevance to the research purpose with economy in procedure”. Barbie (2008:98) mentions that research design entails that a researcher clearly describes the process that will be utilized in order to gather data.

The methods and procedures to be employed in the research must be clearly articulated and they should consider how information will be collected and which methods will be employed.

3.3 Research objectives

This study aimed at investigating the current internal risk control mechanisms and strategies within the various Departments of eThekweni municipality. The following objectives were recognized as highly suitable for this study and relevant to the research methodology that was chosen:

- To ascertain the internal risk management control mechanisms and strategies that are in place in the various Departments of the eThekweni Municipality;
- To evaluate the effectiveness of the internal risk management control mechanisms and strategies of the eThekweni municipality;
- To understand the barriers to implementation of effective internal risk management control mechanisms and strategies
- To try and assist the Municipality to improve understanding or awareness within the department on activities affecting exposure to risk.

3.4 Approaches to research methodology

According to John et al (2007:13) mixed methods research is the kind of method in which a researcher joins qualitative and quantitative research methods to collect data, for the intention of broad and depth of understanding and validation of a particular study. Robert *at al*, (2001:89) “Mixed methods research is the type of research in which a researcher or team of researchers combine elements of qualitative and quantitative research approaches (e.g. use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purpose of breadth and depth of understanding and corroboration”. Holland and Campbell (2005:21) maintained that qualitative and quantitative research methods are stronger when they are joined and they provide rich data. Tashakkori and Creswell (2007:3) confirm that there are many studies that have employed mixed methods when conducting their research. Mixed methods provide high quality and valid information. Trochim (2006:30) also explains that data collection maybe more well-ordered and proficient if these methods were used collectively. Mackey and Gassy (2005:21) point out that if both methods were integrated this could improve attaining effective research measurement and absorbing more data for better conclusions and results. For the purpose of this

study both quantitative and qualitative methods were implemented to gather primary data. The first set of questionnaires were developed and respondents were required to tick in the appropriate box (quantitative) while the second set of questionnaires (qualitative) were established particularly for senior employees. Included were structured questionnaires which assisted the researcher to draw an in-depth understanding about the current internal risk control system of eThekweni Municipality.

3.5 Survey method

Burgess (2001:9) describes a pilot study as a minor research test conducted before the main research. The pilot study identifies any mistakes and poorness in the research and improves them prior to the main study. For the purpose of this study the questionnaires were tested and pilot studies were conducted.

3.6 Target population

Brynard and Hanekom (1997:45) explain population as the focus group or area that a researcher wishes to target in order to find out the truth about the particular group or area, for example, primary school learner, dogs, and cats and so on. Bless (2006:87) mentions that it is extremely vital to first identify the target population of interest to your study. He further explains that population is the target group of elements that a researcher has the intention of studying a particular truth about them. For the purpose of this study, the target population was identified as all the departments/units of the eThekweni Municipality. A total of 41 Departments of the eThekweni Municipality were identified as the target population of this study

3.7 Sampling procedure

White (2000:60) points out that probability sampling techniques are the most appropriate way, (and it is regarded as the proper methods) that researchers will perform numerical analysis. Probability methods entails that every member of the selected sample has likely possible opportunity of being selected. Probability sampling is the method that has no bias.

Maree (2007:160) is of the opinion that the non-probability sampling method does not involve random sampling of the elements thus it will be not easy to present most critical conclusions. For the purpose of this study probability sampling methods were employed and simple random sampling was used to draw a sample of 8 departments from the population of 41 departments

3.8 Data collection methods

Fox and Bayat (2007:88) explain that a questionnaire is the logic list of questions to which a respondent is to provide realistic answers. Rossman and Rallis (2003:59) mention that a significant element of a high quality research plan is to ensure that the design of the questionnaire speaks to the accuracy of the purpose of study. White (2003:50) explains that questionnaires are intended to gather data in a methodical and structured way that allow answers to be measured, classified, and examined numerically. Lewis et al (2008:355) describe a questionnaire as a general concept that comprise all methods of data gathering in which all respondents are asked to answer a similar list of questions in a similar order. Since every respondent are asked a similar list of questions, it will yield a well-organized method of gathering replies from a huge sample for quantitative study.

Sekaran (2006:239) mentions that there are two regular methods of gathering data from respondents - they are through the use of open-ended questions and through the use of close-ended questions. In addition, open-ended questions are employed in a study in order to elicit a judgment from participants while close-ended questions demand the participant to consider a choice from a list of options supplied by the researcher and, it is consistent, making it simpler for the researcher to analyze the numeric data. On the other hand, Drawson (2002:160) mentioned that a combination of both open-ended and closed-ended questionnaires is when research questionnaires begins with multiple choice questions where there are small tick boxes for a suitable answer and then it is followed by open-ended questions where the respondents are expected to explain and describe answers in detail.

This study implemented both quantitative and qualitative methods of data collection. The questionnaires for ordinary employees consist of two sections (A and B) which is quantitative section A where the questionnaire presents demographics and section B where it presents closed-ended questions where the respondents were provided with small boxes to tick where they feel it's appropriate. For the qualitative method this questionnaire also has two sections, the first section is A where it requires respondents to provide demographic details and section B which has open-ended question where the researcher is expected to respond in descriptive manner. Enough space was allocated for each question.

3.8.1 Advantages

- The respondents are easy to reach

- Financial resources were saved because respondents are gathered together
- The population are professional and hence the researcher does not need to translate the questionnaire into other languages
- The study allowed the respondents to provide in-depth information because the study is relevant to their daily life

3.8.2 Disadvantages

- It's not easy to determine if the participant is providing reliable data
- Respondents do not have enough time hence it is not easy to allocate time for someone who is coming to conduct research and hence this delays the research time frame
- The research is independent of the field respondents asking sensitive questions, hence the researcher needs to be professional when dealing with academics because they would also want to prove themselves knowledgeable of research.
- Other respondents provide false information in order to get rid of the researcher.

3.9 Measuring instrument

This study conducted a pilot study of the relevant target population, errors that encountered were amended and the questionnaire was then reliable enough to draw sufficient information from the respondents.

3.10 Development of questionnaires

3.10.1 (Questionnaire for ordinary employee) Section 1: demographic details - Quantitative method (Closed-ended questions)

- Name of Department
- Age
- Gender
- Qualifications
- Experience
- Position
- Salary scale

3.10.2 Section 2: Quantitative method (Closed-ended questions)

1. Are you aware of any potential risks within your Department?

- ☐Yes ☐No
2. Does your Department conduct risk management processes such as risk identification, measurement, risk control and risk evaluation?
- ☐Yes ☐No ☐ I don't know
3. Are you aware of different types of risks within this Department?
- ☐Yes ☐No
4. Have you ever been involved in any risk while you were still on duty and do you feel safe here?
- ☐Yes ☐No
5. Refer from the above question, do you think enough securities/risk control was effectively implemented and the potential of risk were minimized/reduced?
- ☐Yes ☐No
6. How many times have the above mentioned risk occurred in the last five years?
- ☐1 ☐2 ☐3 ☐4 ☐more than 5
7. Does your Department conduct risk identification continuously and how often?
- ☐Yes ☐No
- daily☐ weekly☐ monthly☐ quarterly☐ yearly☐
8. Does your Department have a comprehensive record keeping in risk management programmes?
- ☐Yes ☐No
9. Does your Department conduct risk inspections that involve visit to areas where the activities and the department's delivery of services is undertaken?
- ☐Yes ☐No
10. Does your Department conduct research on risk that involves surveys, risk-discovery questionnaires that address all the properties, assets and major activities of your department?
- ☐Yes ☐No
11. Does your Department currently have effective risk reduction such as physical devices and procedural measures including the installation of security locks, bars, and alarms to detect thieves?
- ☐Yes ☐No

12. Does your organization conduct risk reductions through organizational planning that include the use of educational programmes, business planning, educating staff about the causes and consequences of loss continuously and how often is being undertaken?

☐ Yes

☐ No

daily ☐

weekly ☐

monthly ☐

quarterly ☐

yearly ☐

13. Does your Department evaluate risk on an ongoing basis to ensure success and that it contributes to the goals and objectives of the institution?

☐ Yes

☐ No

14. Does your Department have a well establish risk management programmes that is based on three critical components: centralized unit, trained staff, formal management and good record keeping?

☐ Yes

☐ No

3.10.3 Qualitative method (questionnaire for senior employee) open-ended questions

(Section 1: demographic details)

- Name of Department
- Age
- Gender
- Qualifications
- Experience
- Position
- Salary scale

3.10.3 (Section 2: Qualitative questionnaire)

1. Which risks do you think have the high, low medium frequently in your Department?

Example

Types of risks

High

Medium

Low

Theft X

Fraud X

Injury to staff X

Types of risk	High	Medium	Low

- 2 Does your Department implement procedural controls that include physical, Authorization and Accounting, Please explain how?

--

- 3 Internal control measures should be present within any system: directive, detective, corrective, compensating and constructive they are designed to carry out various functions that seek to prevent risk, please explain if they are effectively implemented within your department and how?

--

- 4 The focus of implementing and maintaining internal control systems should be accomplishing goals and objective of the organization. Explain how management implements internal control system within your department?

--

- 5 Does your organization conduct internal control process such as organize, conduct vulnerable assessment, develop plan for subsequent action conduct internal control review etc.?

- 5 Internal control mechanism should be based on certain principles ensuring that they add value to the organization, please explain if your department implemented general principles such as proof of security measures, adequate safe guarding of assets, and proper accounting for transaction?

- 6 Does your Department conduct macro and micro-risk identification and to what extent?

- 6 Describe any types of risk that are often experienced in your Department and to what extent. e.g. injured on duty, twice a month?

- 7 Please explain if your department utilizes methods of risk control, risk avoidance, risk financing and risk transfer, to effectively handle risk?

- 8 Does your Department conduct programmes such as learning and awareness on risk management and how often?

- 9 Does risk management staff attend risk trainings continuously?

- 10 Do you think the current risk internal controls that seek to minimize, avoid and prevent risk within your Department are currently serving the purpose?

3.11 Methods to avoid bias

“Research bias is a form of response bias that occurs whenever there is a flaw in a survey’s research design. This systematic error can be caused by problems with various different aspects of a study’s research methodology. Most of these issues arise from the lack of planning out a clear research purpose and objectives as well as the absence of secondary research before initiating a study. A lack of planning and overall understanding of the topic being studied can make it difficult to create a survey with the correct list of questions and lead to higher amounts of error.”
(<http://fluidsurveys.com/university/tips-for-overcoming-researcher-bias>)

3.11.1 Question bias

The researcher carefully checked the questions and the same questions were tested on the relevant population to check that there were no mistakes - errors were amended.

3.12 Data Analysis

Quantitative data will be analyzed through the SPSS Version 23 and qualitative data will be analyzed through NVIVO software. McQueen and Knussen (2002:119) *cited in* de Kock (2010:51) explained that one of the benefits of SPSS is that collected data can be arranged, summarized and

simplified into statistically meaningful information. Hence data collected will be analyzed using the SPSS package.

3.13 Validity and Reliability

The validity of the measuring instrument was addressed in order to ensure that the measuring instrument measured the intended concept and answer the research question. As noted by Somkh and Lewin (2008:16), a measure can always be reliable and generate the same result but not valid (not measure the intended concept). Neuendorf (2002:113) views validity as the standard of having “good” measurements that ensures that the researcher has followed reliable procedures and methods. The reliability was also be considered in assessing whether the instrument that was used to obtain results from the population generates the same results when it’s repeated on the same population (see Maree, 2007:215).

3.14 Conclusion

This chapter discussed the research design and the research method. The research method was clearly explained, the techniques and instrumentation of the study were clearly outlined. The study utilized a mixed method approach because of its effectiveness in generating rich data. Primary data of the study was collected by using structured survey questionnaires and interviews. This study employed mixed methods for data collection. The aim of the study was to investigate the current risk internal controls mechanisms and strategies within the various Departments of eThekwin Municipality and assist the municipality to ascertain the internal risk management control mechanisms and strategies that are in place in the various Departments of the eThekwin Municipality.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF RESULTS

4.1 Introduction

This chapter detail the presentation and analysis on the facts deduced in the course of this study. Also, the study aim at contributing to the knowledge by providing an insight to strategies needed to influence internal risks control mechanism and barriers that arises within the many departments of eThekwini Municipality. Additionally, the study employ the use of mixed method practice to analyze data by using SPSS version 23 to assess the data based on the details supplied by the respondents. The survey is descriptive in nature as it uses cross-tabulations and chi-square method to subject the evidence produced by the respondents into test. The secondary objectives of the study are:

- To establish the internal risk management control mechanisms and strategies that are in place in the various Departments of the eThekwini Municipality;
- To evaluate the effectiveness of the internal risk management control mechanisms and strategies of the eThekwini municipality;
- To understand the barriers to implementation of effective internal risk management control mechanisms and strategies
- To try and assist the Municipality with improving the understanding or awareness within the departmental activities affecting exposure to risk.

4.2 Results

In order to ensure that the goal of the study is realized, the questionnaire of the study was divided into section A and B. The A section of the questionnaire is addresses the responses from the respondent and part B, in a closed-ended form, each addressing the questions needed to elicit the required information needed for the study. The outcome ascertained are thus presented below.

4.2.1 Biographical Data of Respondents

Table 1:

Gender	Frequency	Percentage
Male	3	37.5
Female	5	62.5
Total	8	100

The gender distribution of respondents clearly reflects that the majority, 5 (62.5%), are female and 3 (37.5%) are male. There is a significant statistical difference between female and male respondents.

This reflect that fair treatment is given to women particularly in job opportunity, active participation in the operational activities and matter pertaining decision making in eThekwini municipality. This will eliminate the problem of inequality in the community of practice and also, a morale to give-in their absolute best to for the upholding of the municipal area.

Table 2: Age of Respondents

Age	Frequency	Percentage
26- 30	1	12.5
31-35	4	50.0
	3	37.5

35+	8	100
-----	---	-----

The above statistics reveal that 1 (12.5%) of the respondents are between the ages of 26 and 30, the ages 31 to 35 bracket accounts for 4 (50.0%) of the respondents, 3 (37.5%) are those of the age bracket of from 35 and above. A statistical finding is that workers who are between 26 and 30 years account for 12.5% of the sampled population. This reflects that it is still difficult for the youth of eThekweni to get employment within the Municipality which means that factors such as poverty, lack of education, diseases, drought, inequality distribution of income and resources amongst others serves as preventing factors hampering the youth of eThekweni Municipality to make to experience unemployment within the community (Ramukumba, 2014).

Table 3: Departments of Respondents

Department	Frequency	Percent
Councillor Support	1	12.5
Expenditure	1	12.5
Financial Administration	1	12.5
Housing	1	12.5
Libraries and Heritage	1	12.5
Performance and Risk	1	12.5
Real Estate	1	12.5
Water and Sanitation	1	12.5
Total	8	100.0

Respondents, 1 (12.5%), interviewed during the fieldwork research visit are employed in the councillor support department. Followed by the, 1 (12.5%), that is also employed in the expenditure department, followed by financial administration with 1 (12.5%), housing department with 1 (12.5%), libraries and heritage department with 1 (12.5%), performance and risk with 1 (12.5%), real estate with 1 (12.5%), water and sanitation department also with 1 (12.5%). The statistics reveal that only one responded were interviewed for each department at

eThekwini Municipality, the researcher decided to draw a sample of each senior employee per department from the sampled population in-order to gage an in-depth understanding on current internal risk control measures.

Table 4: Level of Educational of Respondents

Certificate	2	25.0
Diploma	4	50.0
Degree	2	25.0
Total	8	100

The educational qualifications of respondents revealed that the majority of respondents, 4 (50.0%), are those with diplomas, followed by matriculation with 2 (25.0%), respondents 2 (25.0%), are those with degrees. The statistics reveal that it is not easy for the respondents with certificate to be employable at the eThekwini municipality.

The statistics also reveal that there are few respondents that has degrees who holds higher positions within the eThekwini municipality. Khalid and Bahtti (2015) observe that number of reasons such as lack of professional competence, a lack of experience, lack of skills, or operational acumen amongst orders. The working organization will always prefer to employ people with greater passion, strength, abilities with multi-talent ideas who can strategically contribute to the development of the region.

Table 5: Length of Service

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.00	1	12.5	12.5	12.5
	4.00	1	12.5	12.5	25.0
	5.00	1	12.5	12.5	37.5
	6.00	2	25.0	25.0	62.5
	10.00	1	12.5	12.5	75.0
	15.00	1	12.5	12.5	87.5
	19.00	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

The mean and standard deviation of the work experience was 8.5 ± 5.7 years. This implies that respondents had been in employ for a while and this is also a useful fact as it indicates responses from experienced workers.

Table 6: Grade of the respondents.

Grade	Frequency	Percentage
7	1	12.5
8	2	25.0
10	2	25.0
12	3	37.5
12.00	3	37.5
	8	100.0

Respondents, 1 (12.5%), interviewed during the fieldwork research visit is has grade 7. Also, by those possessing grade 8 are 2 in number with 25.0%. Moreover, those with grade 8 are two in numbers with grade 10 (25.0%), while majority of the respondents are of grade 12 are 3 (37.5%). The statistic revealed that the majority of respondents are holding higher grades within the municipality which means that the majority of them had been in the employment for sometimes and they understand the organization very well and will provide reliable information.

Table 7: Positions

Position	Frequency	Percent
Accounting Officer	1	12.5
Building Maintenance Officer	1	12.5
Executive Secretary	1	12.5
Professional Property Valuer	1	12.5
Senior Administrator	1	12.5
Senior Financial Officer	1	12.5
Senior IT Technician	1	12.5
Senior Performance and Risk Officer	1	12.5
Total	8	100.0

The statistics on the positions of respondents reveal that 1 (12.5%) is an accounting officer this respondent was selected because of the nature of work that they does has a high potential of risks hence, the researcher was interested on this title. Followed by building and maintenance officer 1 (12.5%), executive secretary 1 (12.5%), Professional Property Valuer 1(12.5%), followed by a senior administrator 1(12.5%), a Senior Financial Officer with 1 (12.5%), as well a Senior IT Technician 1 (12.5), and Senior performance and risk.

Presentation of Data Generated from Employees at eThekweni Municipality

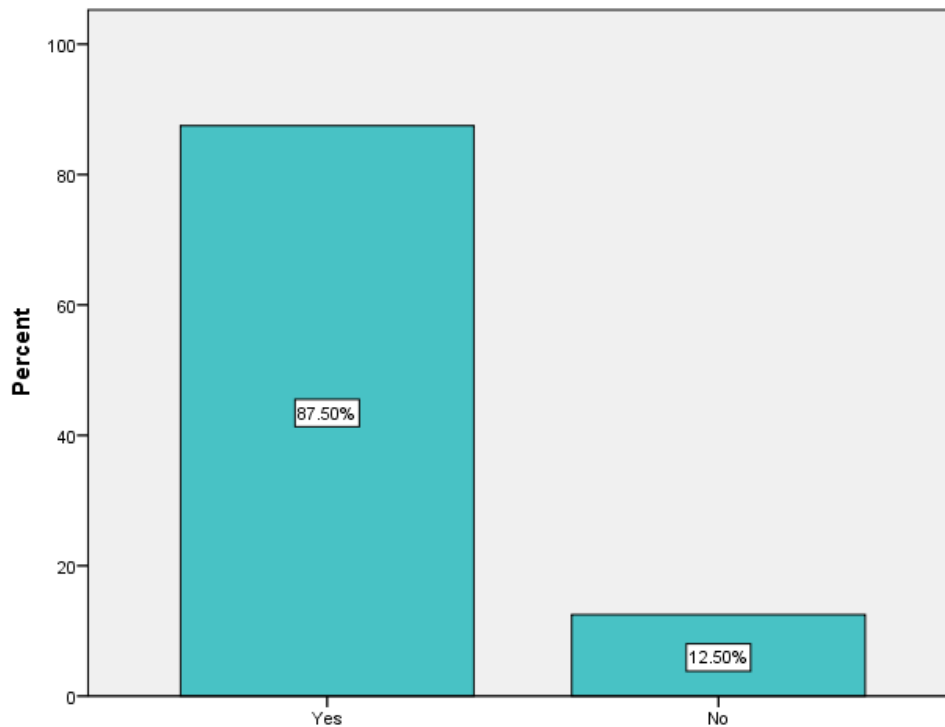


Figure 3: Are you aware of any potential risks within your Department?

The result from the chart above inferred that large volume of employees 87% are aware of potential risks in their department.

Kurata and Hemmings (2015: 2) view awareness as an understanding of facts on particular interest that is based on information or individual's experience. It is a phenomenon that enables an individual to have idea of event of occurrence that is happening in one's environment. In the author's view, the end result of awareness is to create an opportunity through which an individual is able to prepare for unforeseen circumstances.

Does your department conduct risk management process such as risk identification, measurements, risk control and evaluation?

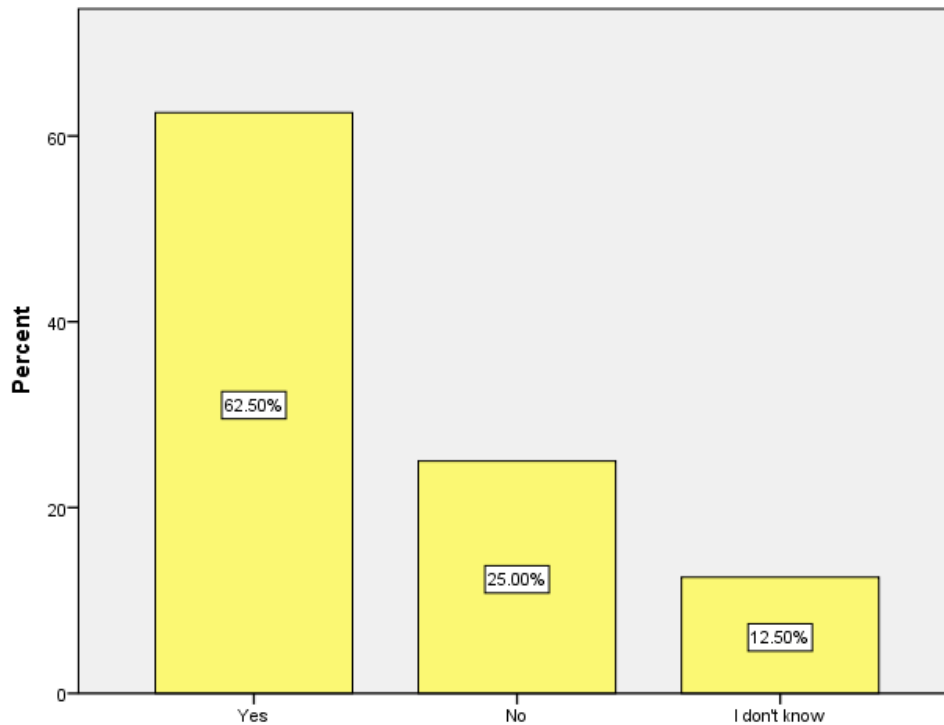


Figure 4 risk management process

A high number of 62.5 % respondents agreed that their department conducts risk management processes such as risk identification, measurements, risk control and evaluation.

Risk management process is an approach in get task done though adoption of policies, principle and practices ideally for establishing business framework to make risk analysis, risk evaluation, that allow risk treatment, risk monitoring and risk communication (Ennouri, 2013: 288). This is to create an atmosphere for smooth running of risk where managers and teammates are able to implement systematic risk to achieve the desired result.

Are you aware of any different types of risk within this department?

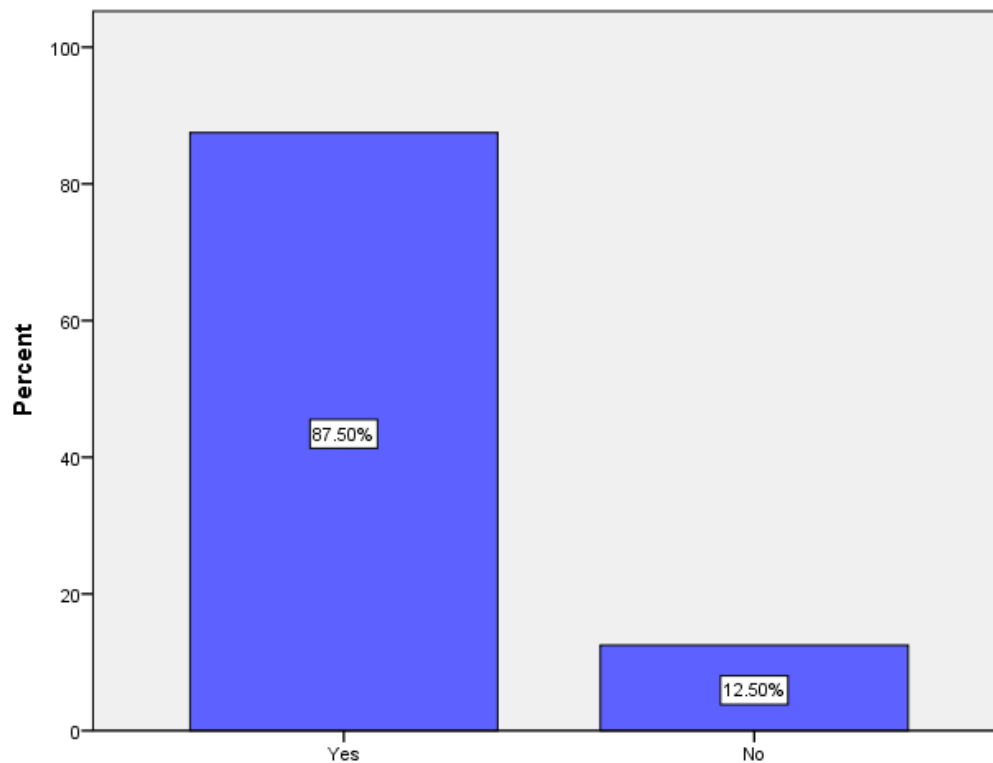


Figure 5: different types of risk

The above statistics from respondents interviewed shows that the majority of 87.5% agreed that they are aware of different types of risk within their departments. It is evident that, based on the statistics, the eThekweni municipality does have a risk reduction plan that educates employees about potential risk and they also conduct employee risk awareness.

Risk is a conception that vested on the probability though which gain or loss is made on a valuables (de Azevedo, Ensslin and Jungle, 2014: 367). It is an imminent uncertainty about abnormality from expected earnings or expected outcome the effect of which can expose an individual of disappointment.

Have you ever been involved in any risk while you were still on duty and do you feel safe here?

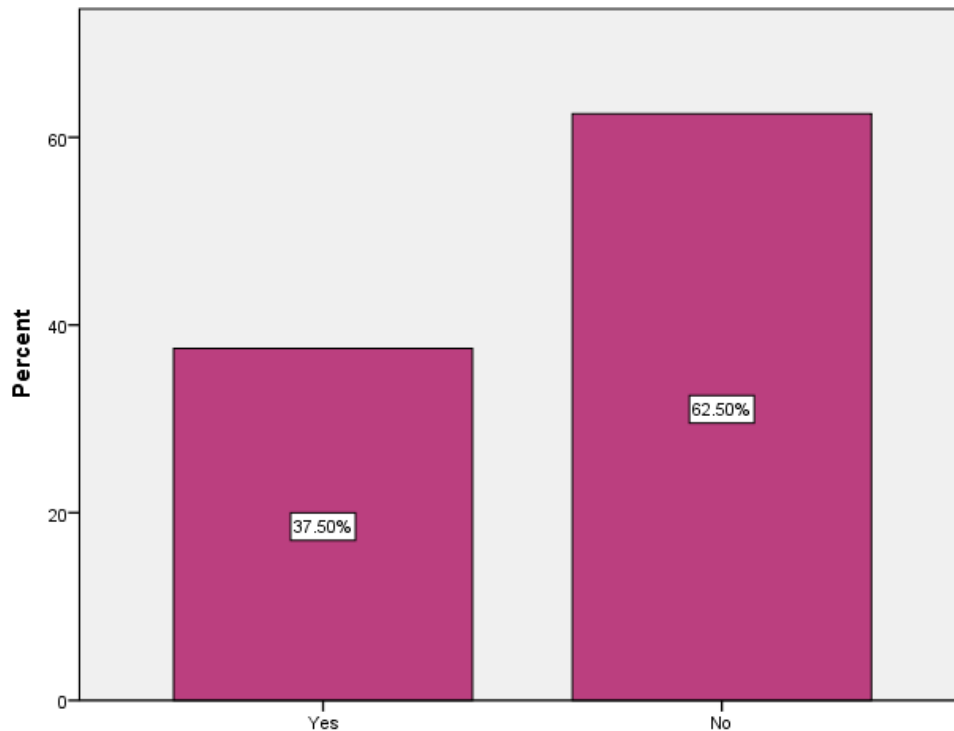


Figure 6:

The above bar chart indicated that the many amongst the employee 62.5%, have not been in any risk taking participation activities that subject their job security to a threat while on the contrary 37.5% agreed to this statement.

Zubair, Bashir, Abrar, Baig and Hassan (2015: 307) state that employee will only contribute meaningfully to the operational running of the organization which they work for provided that their means of livelihood is secured. The factors militating the involvement of employees in risk taking participation to include management style of the leaders, poverty, lack of education, experience and risk potential. In the opinion of the authors, work encourage, delegation of duties are style of approach to engage the subordinate to engage in full participation of organizational duties.

Refer from the above question, do you think enough securities/risk control was effectively implemented and the potential of risk were minimized/reduced?

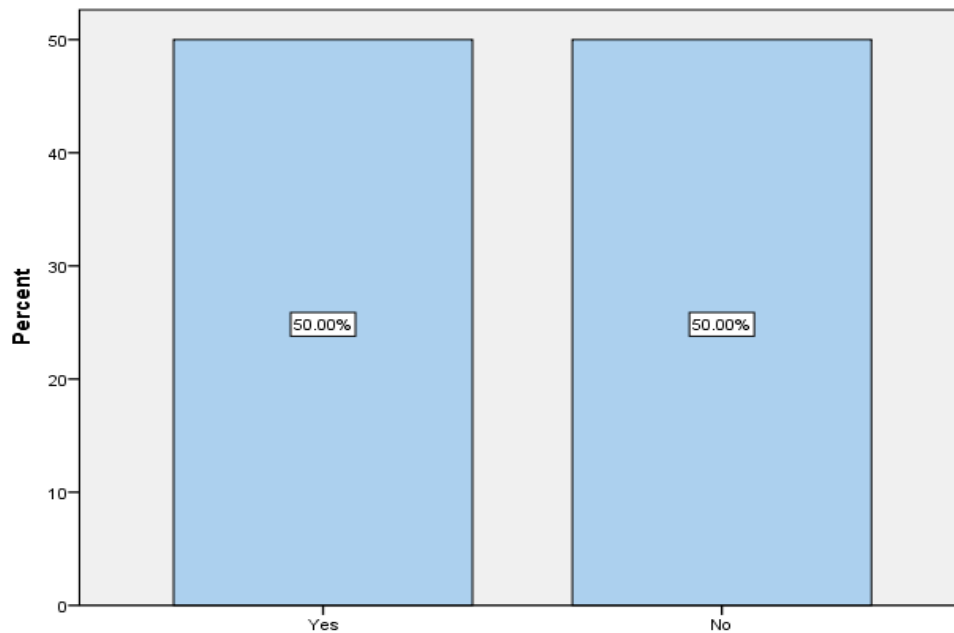


Figure 7:

The above result depicts that respondents cannot state as whether or not enough securities or risk control was effectively implemented and the potential of risk was not minimized or reduced.

Aven (2016: 2) explain that risk control system is exhibited into operational activities of business to for legal requirement for hazard identification, assessment, control and review. It is a concept that is enforce by management to ensure orderliness in order not to leave room for mistakes, errors or misappropriation that can be injurious to the business.

How many times have the above mentioned risk occurred in the last five years?

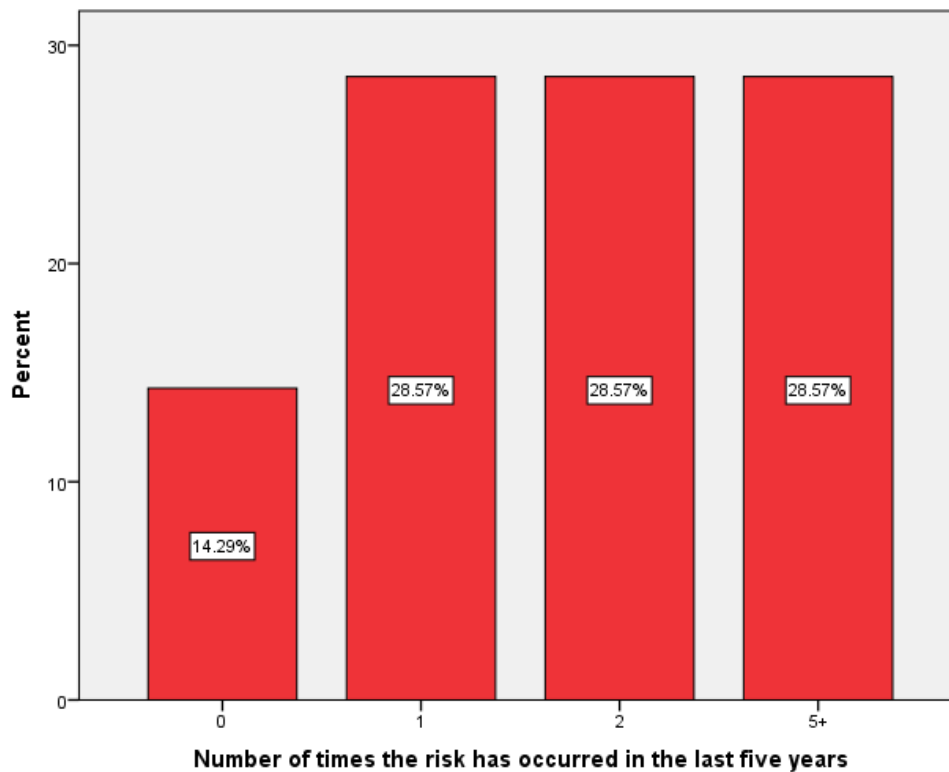
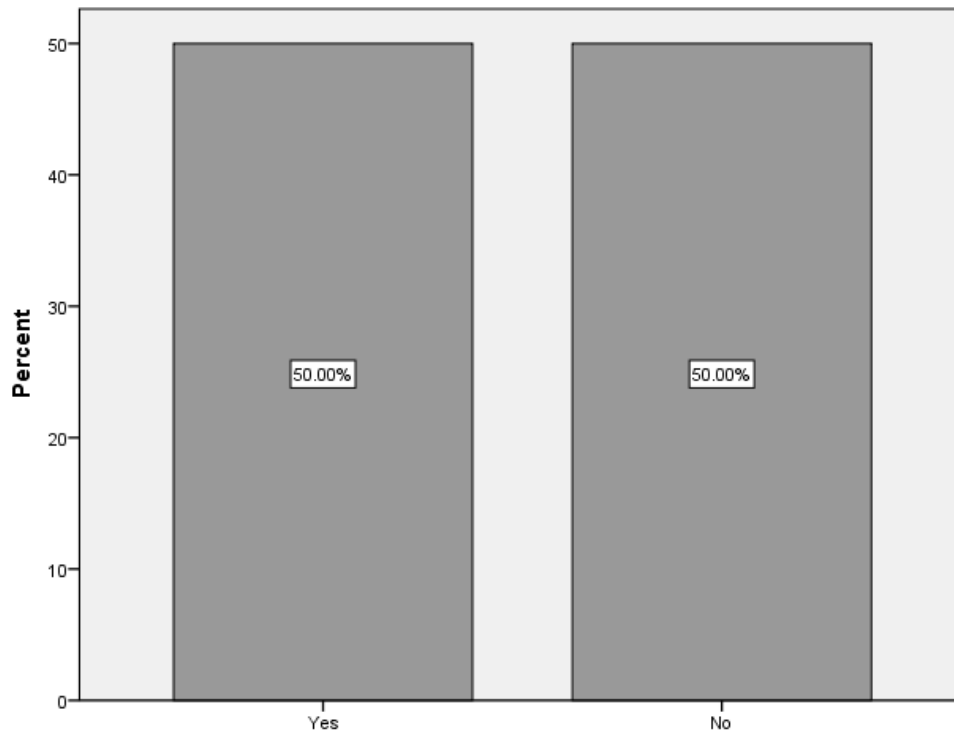


Figure 8

85.7% of the respondents confirmed that risk control have been a reoccurring event for last five years as a preventive control business hazards within the organization.

Kokobe and Gemechu (2015: 2) describe risk management as the procedures, practices and guidance applied by the management for purpose of ensuring improvement on work value, responsibility, evaluation and monitoring. Poor implementation of organizational policies can be detrimental to the objective for which policy is set (Bastaminia, Rezaei and Dastoorpoor, 2017: 269).

Does your Department conduct risk identification continuously and how often?



The contentiously identification of risk 1

Figure 9

Average number from the total population of respondents concur to the fact that the department conducts continuous risk identification often. The inability of others articulate on whether risk identification is often conducted can be tantamount to elements such as employees' cadre in the organization, decision of the top management authority, the flow of communication system, interpersonal relationship between the employees amongst orders.

Bourne (2016: 433) views the flow of communication within the business practice as an ideal way to foster interpersonal relational relationship among the work force as this will give the subordinate a sense of belongings to the organization which they work for, without feeling inferior.

Does your Department conduct risk identification continuously and how often?

How often does your department conduct risk identification?

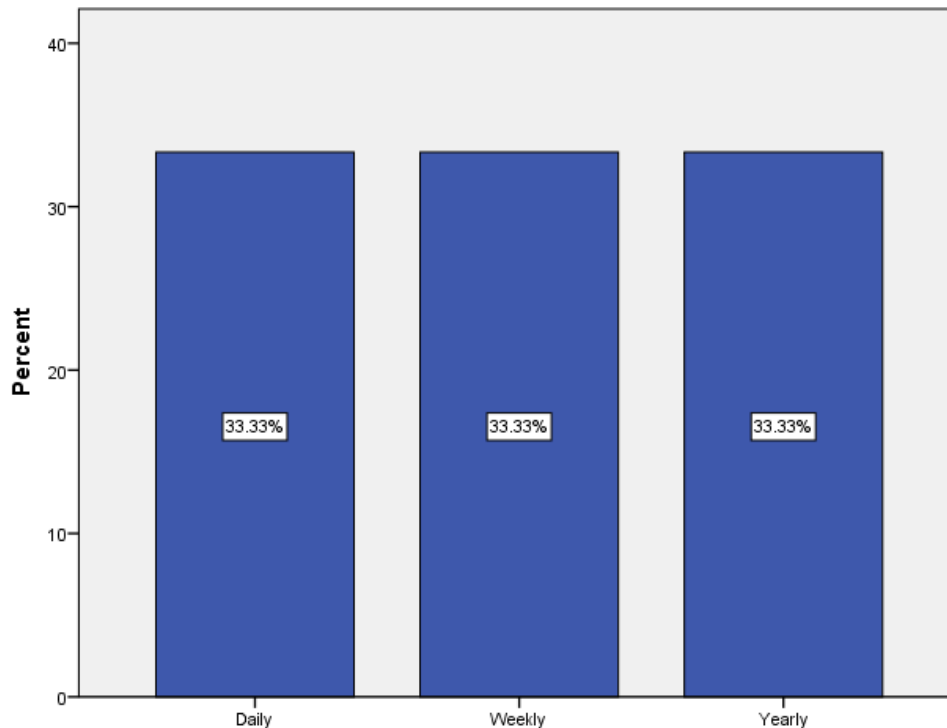


Figure 10: number of times risk being identified (frequency)

As high as 99.9% settle by admitting that frequent conduct of risk identification do take place in their department at all time.

Lewis and Reicher (2016: 1603) opine that communication is the process through which ideas is transmitted in form of message from the encoder to the decoder. Respondents in respect of the information from the chat above are able to emphatically express that, risk identification occur in their department on regular basis. Creating awareness in the form of information flow from the people in the position of authority to other member stance as a better avenue to relay organization's performances to other people in the workplace. Feedback on performance level of action in an organization is a model that allow improvement to ensue on the behavioural part of the employees (Reising, Carr, Gindling, Barnes, Garletts and Ozdogan, 2017: 82).

Does your Department have comprehensive record keeping in risk management programmes?

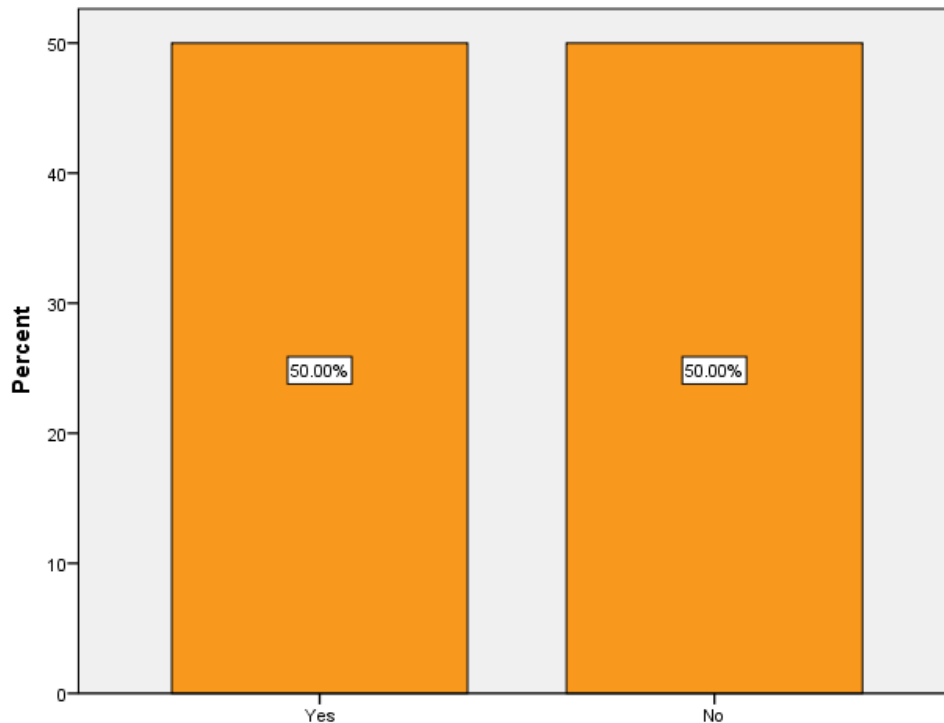


Figure 11: comprehensive risk management records

An aggregate of 50% harmonize that their department has the comprehensive record keeping in risk management programmes whereas the other 50% cannot make the pronouncement to this effect.

Zubair *et al.* (2015: 306) note that poor documentation of records ruin decision making as knowledge and understating of past histories are endangered. This however have might have a negative influence on the on the vision, mission and objective for which information is to be initiated. Consequently, proper record keeping must be set straight for easy retrieval that leaves no room for ambiguity, obstruction but for clear understanding.

Does your Department conduct risk inspections that involve visits to areas where the activities and the department's delivery of services is undertaken?

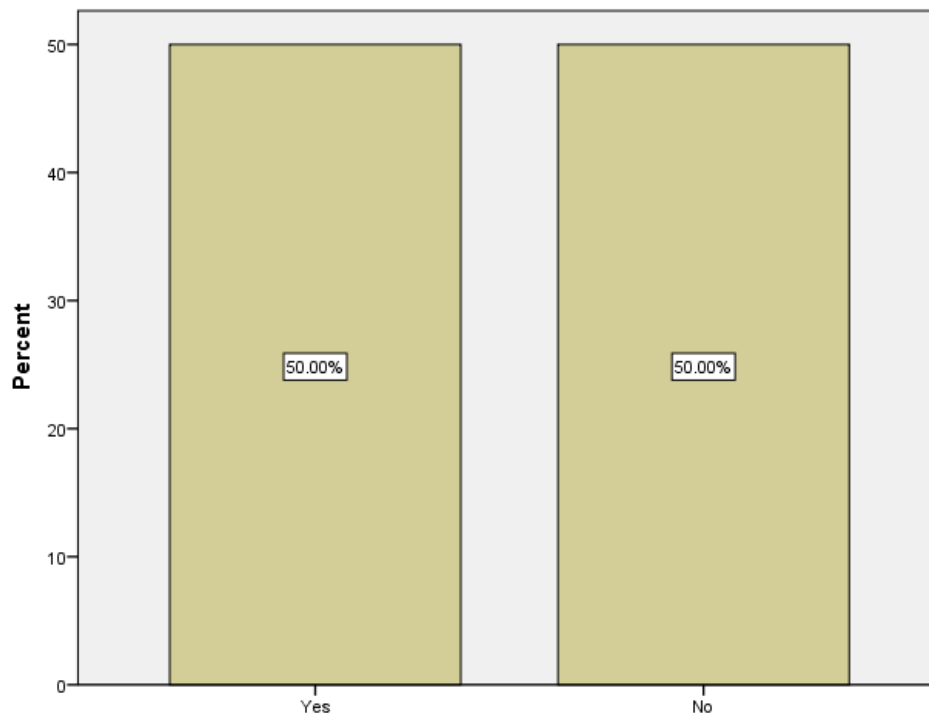


Figure 12:

50% of the participants proved that risk inspections are always effected by the department to the areas where the activities and the delivery of services are undertaken.

Knechel (2016: 215) views auditing is an independent examination of document or action for the propose of establishing whether financial statement and non-financial statement disclosures display a true and fair view on issue of concern. This is to prevent deceptive means of people to take undue advantage of event of occurrence to perform swindling.

Does your Department conduct research on risk that involves surveys, risk-discovery questionnaires that address all the properties, assets and major activities of your department?

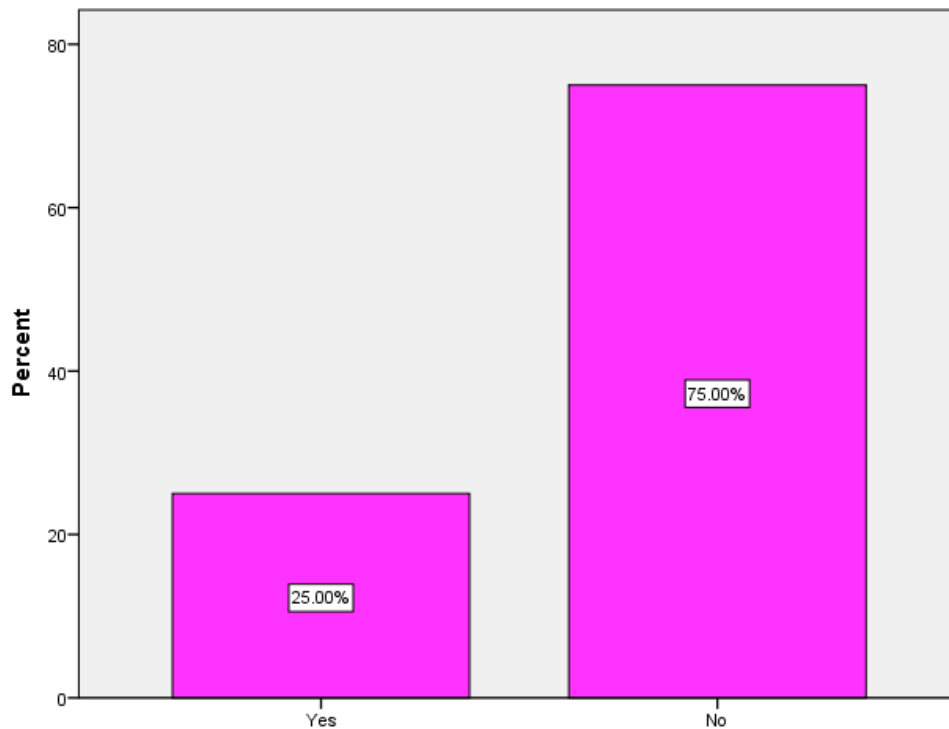


Figure 13

The evidence provided from the graph above gives an indication that 75% of the participants believed that their department did not engage in the conduct of research on risk that involves surveys, risk-discovery questionnaires that address all the properties, assets and major activities of the department.

Negligence on the part of an individual is the inability to exercise degree of reasonable care of duty, people or asset, the effect of which can lead to economic loss on the account of carelessness (Robertson, 2013: 33).

Does your Department currently have effective risk reduction such as physical devices and procedural measures including the installation of security locks, bars, and alarms to detect thieves?

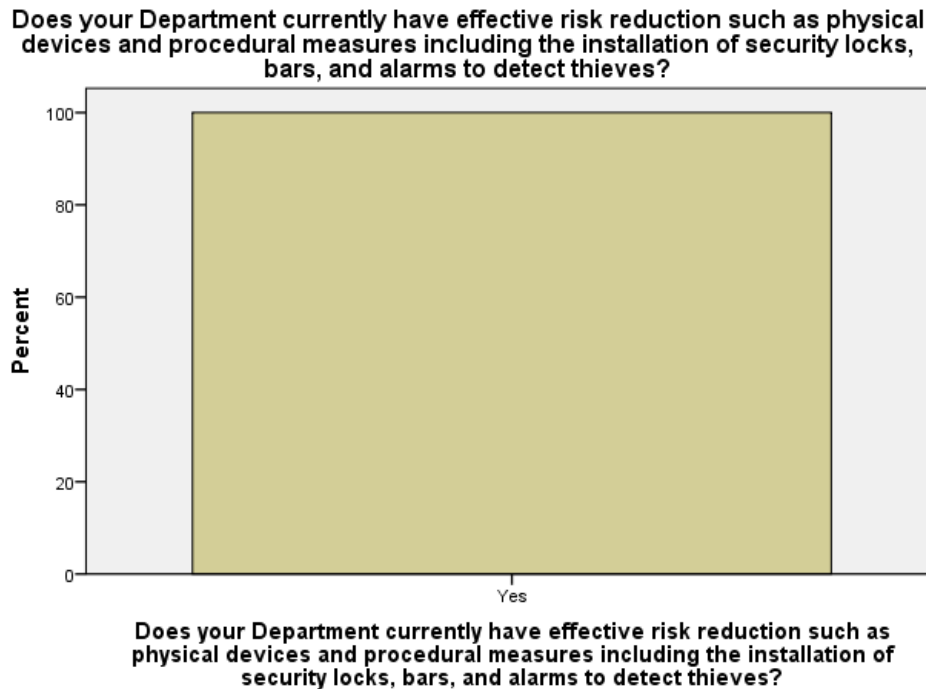


Figure 14

The above statistics provide an indication that all of the respondents 100% accord that department is equipped with requisite implements needed to ensure effective risk reduction such as physical devices and procedural measures including the installation of security locks, bars, and alarms to detect thieves.

Bressler (2009: 9) notes that organizations are of the concern risk of insecurity, regardless of its ownership whether it is privately owned, or possessed by the government. Prominent amongst the elements causing environmental unrest in our modern society are poverty, famine and other crime related factors such as fraud, hacking, breakage, robbery, amongst others are factors causing untold damage to our civil society.

Does your organization conduct risk reductions through organizational planning that include the use of educational programmes, business planning, educating staff about the causes and consequences of loss continuously and how often is being undertaken?

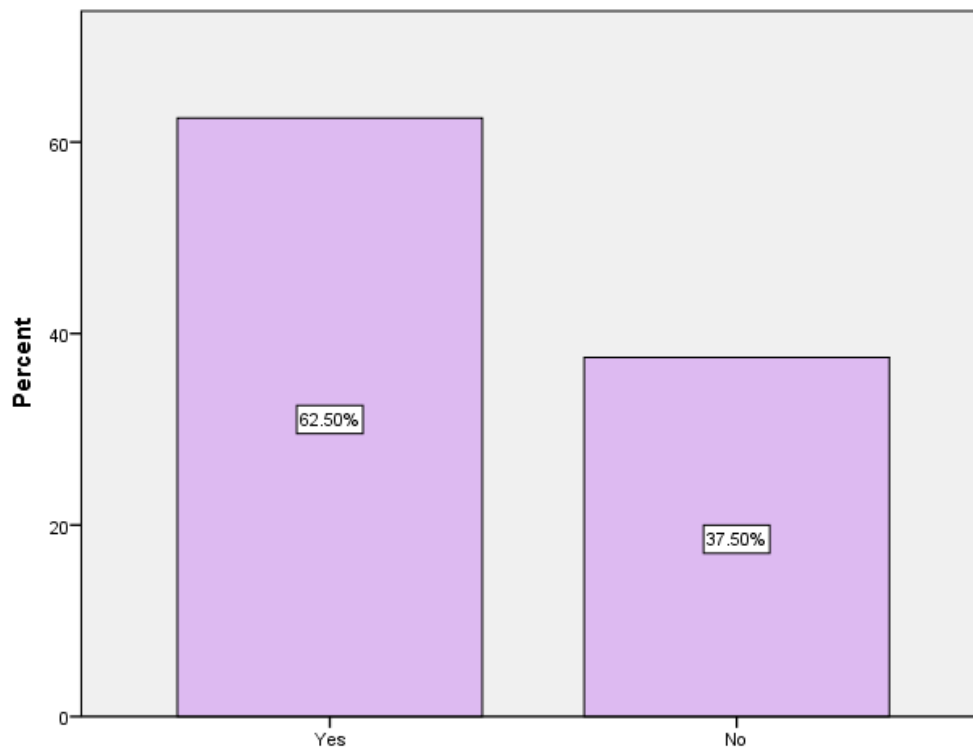


Figure 15

The above chart appearance provides an indication that 62.5% of the respondent established that their department conducts risk reductions through organizational planning.

Planning according to Jeseviciute-Ufartiene (2014: 177) is a systematic approach that is clear, comprehensive, efficient, informative, logical and transparent in nature for the purpose of carrying out predominant decision that are perfect for making solutions. It is a concept that help a community to give right response to any define question that requires needed attention to avoid risk of disappointment.

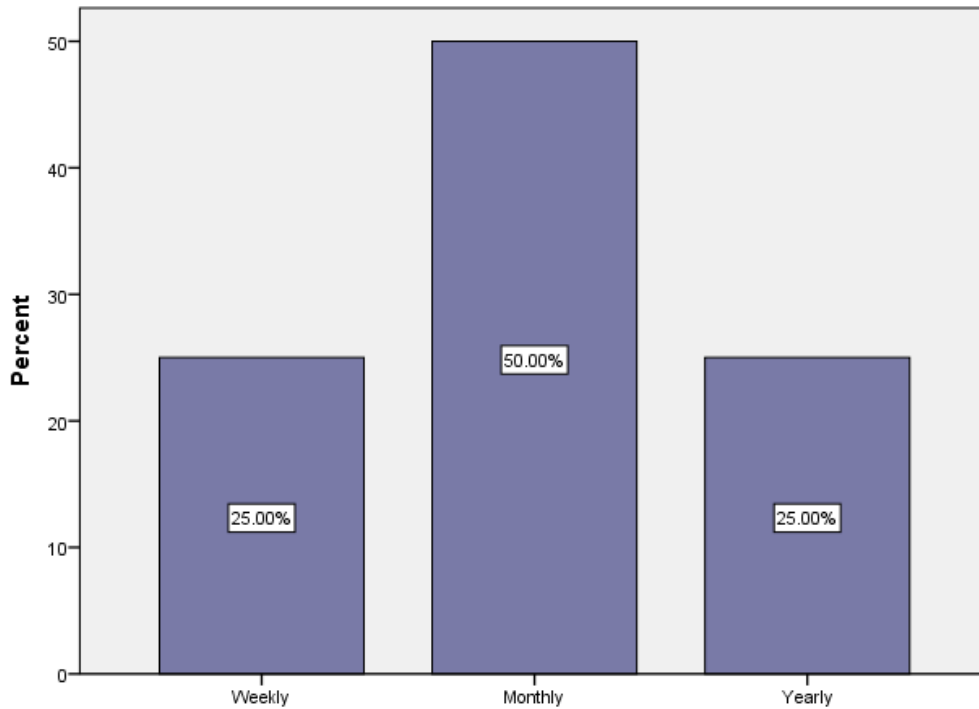


Figure 16: The frequency of respondents

The above statistics from respondents interviewed reveal that the respondents (25%) said that their department conduct risk reductions through organizational planning that include the use of educational programmes, business planning, educating staff about the causes and consequences of loss weekly, the majority of respondents reveal that (50.0%) revealed that their department conduct risk reductions through organizational planning that include the use of educational programmes, business planning, educating staff about the causes and consequences of loss monthly, (25.0%) confirmed that their department conduct risk reductions through organizational planning that include the use of educational programmes, business planning, educating staff about the causes and consequences of loss yearly.

Does your Department evaluate risk on an on-going basis to ensure success and that it contributes to the goals and objectives of the institution?

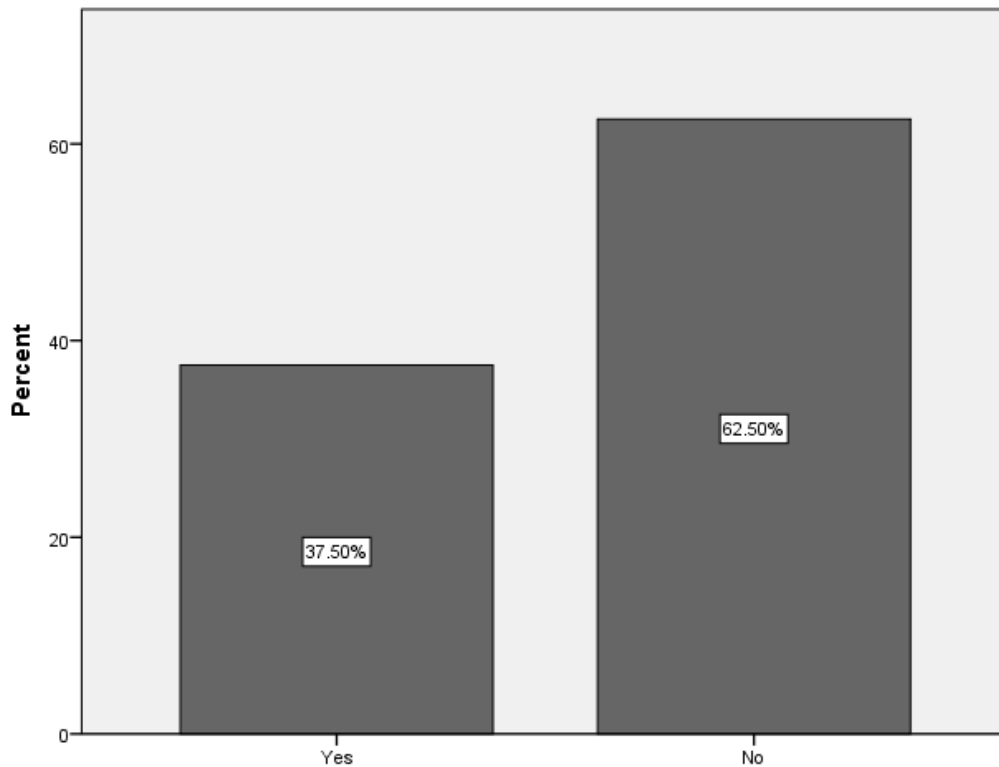


Figure 17

The findings from the table above described that 62.5% of the participants mentioned of their non-awareness about their department evaluating on an on-going basis to ensure success and that it contributes to the goals and objectives of the institution.

Performance evaluation is a logical style that reveal how an individual is able to get task completed (Iqbal and Akbar, 2015: 510). The significance of evaluation is to inspire presentation, meet the quest to know their work assessment, particularly for adjustment purpose to build confidence and promotion of corrective actions.

4.3 QUALITATIVE ANALYSIS

The purpose of this section is to present the findings that originated from open-ended questions in interviews conducted during the answering of the questionnaire. The aim of the open-ended questions was to provide senior management respondents the chance to express some of the issues that might have not been covered in the questionnaire and to gain a greater in-depth understanding about the effectiveness of the internal risk control mechanisms within the various departments of the eThekwin Municipality. The tables below show the responses from respondents.

Q9.1 Does your Department implement procedural controls that include physical, Authorization and Accounting?

	Frequency	Percent
Yes	8	100.0

Respondent's response

All respondents believe that their department has implement procedural that include physical, authorization and accounting this is done by following the guidelines of ISO 3100 requirements.

Q10 Internal control measures should be present within any system: directive, detective, corrective, compensating and constructive they are designed to carry out various functions that seek to prevent risk, please explain if they are effectively implemented

Respondent's response

The respondents have indicated that all control measures has been complied with and meet all requirements that needs to prevent unforeseen risks that might occur within the organization.

Q11 The focus of implementing and maintaining internal control systems should be accomplishing goals and objective of the organization. Explain how management implements internal control system within your department?

Respondent's response

The respondents indicated that the implementation of internal control systems is done according to the principles and policies of the organization's goals and objectives. They further indicated that they also implemented according to the ISO 31 000 requirements.

Q12.1 Does your organization conduct internal control process such as organize, conduct vulnerable assessment, develop plan for subsequent action conduct internal control review, etc.?

	Frequency	Percent
Yes	7	87.5
No	1	12.5
Total	8	100.0

Respondent's response

85% of the respondents agreed that their organization conducted internal risk control processes such as organize, conduct vulnerable assessment, develop plan for subsequent action conduct internal control review. However about 12.5% disagreed with the statement.

Q13 Internal control mechanism should be based on certain principles ensuring that they add value to the organization, please explain if your department implemented general principles such as proof of security measures, adequate safe guarding of assets, and proper accounting for transaction?

Respondent's response

The respondents were not in the position to agree or disagree with the statement therefor they decided not to respond to it.

Q14.1 Does your Department conduct macro and micro-risk identification and to what extent?

	Frequency
Yes	7
No	1
Total	8

Respondent's response

The large number of respondents believed that their department conduct macro and micro-risk identification and these are done according to the guidelines of ISO 31 000 requirements.

Q15 Describe any types of risk that are often experienced in your Department and to what extent. e.g. injured on duty, twice a month?

Respondent's response

The respondents seemed not to like or be aware of any previously experienced types of risk in their organization therefore they decided not to comment in respect to this question.

Q16 Please explain if your department utilizes methods of risk control, risk avoidance, risk financing and risk transfer, to effectively handle risk?

Respondent's response

The respondents believed that there are many measures that are taken by their departments even although they did not want to be specific.

Q17.1 Does your Department conduct programmes such as learning and awareness on risk management and how often?

	Frequency	Percent
Yes	8	100.0

Respondent's response

All the respondents agreed that their department conduct programmes such as learning and awareness on risk management and this is done based on the organization resources.

Q18.1 Does risk management staff attends risk training continuously?

	Frequency	Percent
Yes	8	100.0

Respondent's response

The respondents highlighted that management staff attends risk training continuously.

Q19.1 Do you think the current risk internal controls that seek to minimize, avoid and prevent risk within your Department are currently serving the purpose?

	Frequency	Percent
Yes	8	100.0

Respondent's response

The respondents believed that the organization implement internal control mechanism that seek to minimize, avoid and prevent risk

As stated by ISO 9000-3000

Cross tabulations

Figure 3: Are you aware of any potential risks within your Department?

Furthermore, when gender was cross-tabulated by the number of any potential risk that they aware within their department, it reveal that a significant number of respondents, 5 (62, 5%) of woman indicated that they were aware of any potential risk within their department, followed by men, 3 (37, 5%) who said that they were not aware of any potential risk within their department. This implies that the municipality is more diverse than before and therefore these percentages inform us that the eThekweni municipality is implementing redress measures by ensuring that women are fairly represented in their employment profile.

Figure 4 risk management process

When the age was cross-tabulated on whether they conduct risk management process such as risk identification, measurements, risk control and evaluation reveal that the majority 4 (50.0%) respondents in the age group 31 to 35 said that their department conduct risk management process such as risk identification, measurements, risk control and evaluation, followed by 3 (37.5%) and 1 (12.5%) said that their department conduct risk management process such as risk identification, measurements, risk control and evaluation.

Figure 5: different types of risk

The gender cross-tabulation of respondents reveals that of the male respondents 3 (37.5%) said that they are aware of different types of risk within this department, 4 (50.0%) of females said that aware of different types of risk within their department and 1 (12.5%) from the females said that they are not aware of any potential risk within their department.

The age cross-tabulation of respondents reveals that 1 (12.5%) within the age group of 26 to 30 said that they are aware of different types of risk within their department, 3 (37.5%) from the age group of 31 to 35 said that they are aware of different types of risk within their department, 3 (37.5%) from the age group of over 37 said that they aware of different types of risk within their department, respondents from the age group 31 to 35 has a statistics of 1 (12.5%) only said that they are not aware of any different types of risk within their department

Figure 6:

The age cross-tabulation of respondents reveals that 1 (12.5%) from the age group of 26 to 30 years old said that they have been involved in a risk while they were still on duty and they don't feel safe here, followed by 1 (12.5%) form the age group of 31 to 35 years old said that they have been involved in a risk while they were still on duty and they don't feel safe here, 1 (12.5%) who are over 35 years old said that they have been involved in a risk while they were still on duty and they don't feel safe here 1 (37.5%) from the age group of 31 to 35 years old said that they have never been involved in any risk while they were still on duty and they feel safe here, 2 (25,0%) from those who are over 35 years old said that they have never been involved in any risk while they were still on duty and they feel safe here.

Figure 7:

When gender was cross-tabulated with whether enough securities/risk control was effectively implemented and the potential of risk were minimized/reduced, 3 (37.5%) from the males said that referring to the above question, they think enough securities/risk control was effectively implemented and the potential of risk was minimized/reduced, from the females 1 (12.5%) said that refer from the above question, they think enough securities/risk control was effectively implemented and the potential of risk was minimized/reduced, 4 (50.0%) from the female said that referring to the above question, they think enough securities/risk control was not effectively implemented and the potential of risk was not minimized/reduced.

Figure 8

When the gender was cross-tabulated with the number of the risk has occurred in the last 5 years the statistics of respondents reveal that 1 (14.3%) from the females said that the above mentioned risk has never occurred in the last five years, followed by another 1 (14.3%) of the females said that the above mentioned risk has occurred once in the last five years, followed by 1 (14.3%) of the females said that the above mentioned risk has occurred twice in the last five years, 1 (14.3%) of the female said that the above mentioned risk has occurred three times in the last five years, 1 (14.3%) from the males respondents said that the above mentioned risk has occurred twice in the last five years, followed by 1 (14.3%) of males said that the above mentioned risk has occurred twice in the last five years, 1 (14.3%) of males said that the above mentioned risk has occurred three times in the last five years.

Figure 9 The contentiously identification of risk 2

The gender cross-tabulation reveals that 3 (37.5%) from the males said that their department conducts risk identification continuously, 1 (12.5%) from the females said that their department conducts risk identification continuously, 4 (50.5%) from females 3 (37.5%) said that their department does not conduct risk identification continuously,

The age cross-tabulation of respondents reveals that 1 (12.5%) from the age group between 26 to 30 years said that their department conducts risk identification continuously, 1 (12.5%) from the age group between 31 to 35 years said that their department conducts risk identification continuously, 2 (25.0%) from the age group over 30 years said that their department conducts risk identification continuously. 3 (37.5%) from the age group between 31 to 35 years said that their

department does not conduct risk identification continuously, 1 (12.5%) from the age group over 35 years said that their department does not conduct risk identification continuously,

Figure 10: number of times risk being identified (frequency)

When the age is cross-tabulated with the frequency, the statistics reveal that 1 (33.3%) from the ages between 31 to 35 years said that their department conducts risk identification daily, 1 (33.3%) from the age group over 35 years said that their department conducts risk identification weekly and 1 (33.3%) from the age group 26 to 30 years said that their department conducts risk identification weekly.

When the gender is cross-tabulated with the frequency, the statistics reveal that 1 (33.3%) females said that their department conducts risk identification daily, 1 (33.3%) males said that their department conducts risk identification weekly and 1 (33.3%) males also said that their department conducts risk identification yearly.

Figure 11: comprehensive risk management records

When the gender is cross-tabulated with the above question, the statistics of respondents reveals that 2 (25.5%) of the male said that their department has comprehensive record keeping in risk management programmes, 2 (25.5%) of the female said that their department has the comprehensive record keeping in risk management programmes, 1 (12.5%) of the male said that their department does not have comprehensive record keeping in risk management programmes and 3 (37.5%) of the female said that their department does not have the comprehensive record keeping in risk management programmes.

Figure 12:

When the gender was cross-tabulated with the above question, the statistics of respondents reveal that 2 (25.0%) of males said that their department conducts risk inspections that involve visits to areas where the activities and the department's delivery of services is undertaken, 1 (12.5%) of females said that their department conducts risk inspections that involve visits to areas where the activities and the department's delivery of services is undertaken. 1 (12.5%) said that their department does not conduct risk inspections that involve visits to areas where the activities and the department's delivery of services is undertaken, 3 (37.5%) female said that their department

conducts risk inspections that involve visits to areas where the activities and the department's delivery of services is undertaken.

Figure 13

When the gender was cross-tabulated with 'does your their department conducts research on risk that involves surveys, risk-discovery questionnaires that address all the properties, assets and major activities of your department', the statistics of respondents reveal that 1 (12.5%) from the males expressed that their department conducts research on risk that involves surveys, risk-discovery questionnaires that address all the properties, assets and major activities of your department, 1 (12.5%) from the females also felt that their department conducts research on risk that involves surveys, risk-discovery questionnaires that address all the properties, assets and major activities of your department, 2 (25.0%) from the males revealed that their department does not conducts research on risk that involves surveys, risk-discovery questionnaires that address all the properties, assets and major activities of your department, the majority of 2 (25.0%) from the females revealed that their department does not conducts research on risk that involves surveys, risk-discovery questionnaires that address all the properties, assets and major activities of your department.

Figure 14

The age cross-tabulation of respondents reveal that 1 (14.3%) from the ages between 26 to 30 years revealed that their department currently has effective risk reduction such as physical devices and procedural measures including the installation of security locks, bars, and alarms to detect thieves, followed by 4 (57.1%) from the ages between 31 to 35 years revealed that their department currently has effective risk reduction such as physical devices and procedural measures including the installation of security locks, bars, and alarms to detect thieves, 2 (28.6%) from over 35 years revealed that their department currently has effective risk reduction such as physical devices and procedural measures including the installation of security locks, bars, and alarms to detect thieves.

Figure 15

The age cross-tabulation revealed that 1 (12.5%) from the age between 26 to 30 years said that their department conducts risk reductions through organizational planning that include the use of educational programmes, business planning, educating staff about the causes and consequences of loss continuously, 2 (25.0%) from the age between 31 to 35 years said that their department

conducts risk reductions through organizational planning that include the use of educational programmes, business planning, educating staff about the causes and consequences of loss continuously, 1 (12.5%) from the age over 35 years said that their department conducts risk reductions through organizational planning that include the use of educational programmes, business planning, educating staff about the causes and consequences of loss continuously, followed by 2 (25.0%) from the age between 31 to 35 years said that their department does not conduct risk reductions through organizational planning that include the use of educational programmes, business planning, educating staff about the causes and consequences of loss continuously, 1 (12.5%) from the age over 35 years said that their department does not conduct risk reductions through organizational planning that include the use of educational programmes, business planning, educating staff about the causes and consequences of loss continuously.

Figure 16

The frequency of the gender reveal that 1 (25.5%) from the females said their department conducts risk reductions through organizational planning that include the use of educational programmes, business planning, educating staff about the causes and consequences of loss weekly, 1 (25.5%) from the males said their department conducts risk reductions through organizational planning that include the use of educational programmes, business planning, educating staff about the causes and consequences of loss monthly, 1 (25.5%) from the females said their department conduct risk reductions through organizational planning that include the use of educational programmes, business planning, educating staff about the causes and consequences of loss yearly.

Figure 17

The age cross-tabulation of respondents revealed that 1 (12.5%) from the ages between 26 to 30 years said that their department evaluates risk on an on-going basis to ensure success and that it contributes to the goals and objectives of the institution, 1 (12.5%) from the ages between 31 to 35 years said that their department evaluates risk on an on-going basis to ensure success and that it contributes to the goals and objectives of the institution, 1 (12.5%) from the ages over 35 years said that their department evaluate risk on an on-going basis to ensure success and that it contributes to the goals and objectives of the institution, 3 (37.5%) from the ages between 31 to 35 years said that their department does not evaluate risk on an on-going basis to ensure success and that it contributes to the goals and objectives of the institution, 2 (25.0%) from the ages over

35 years said that their department does not evaluate risk on an on-going basis to ensure success and that it contributes to the goals and objectives of the institution.

4.4 CONCLUSION

From the comprehended evidences in the course of this study, the analysis of the outcome posit that managers and employees are able to exhibit internal risks control mechanism in a manner that can aid proficiency in various department of eThekwin Municipality. Noticeable among the findings include:

- i. The disparity in gender equality within the organization and department are being leveled, as female employees as given the opportunity to lead and deliver better result more than their male counterpart.
- ii. The findings revealed that people are beginning to give credence to education as a pathfinder to achieving greater success and mainly to abolish ignorance within our community of practice.
- iii. Employees are able to coordinate themselves, as they are equipped with equitable knowledge to address issues of concern within various department at their workplace.
- iv. Much attention has been given to valuable resources within the organization in term of security and safety which is why information is updated at all time to avoid loss information that can help in making good decisions.
- v. The municipality have good planning for their employees in terms of welfare and job satisfaction. This is to make environment worth working with convenience.
- vi. Employees have not been engage in risk taking participation.
- vii. Employees cannot attest as to whether the security was effectively implemented and the potential of risk were minimized or reduced.
- viii. The record keeping were done, but comprehensive risk management process were not efficient enough.
- ix. Risk research activities that involves surveys, risk-discovery, questionnaires that address all the properties, assets and major activities of the department have not been given a considerable thought.
- x. An assessment that guarantee risk in an on-going basis adequate to yield success and contributes to the goals and objectives of the institution have not be ensued.

The following chapter completes this study and proffer recommendation where applicable.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Wiid and Diggins (2013: 79) define research as a systematic procedure employed to acquire needed evidence in lieu of universal element's behaviour or characteristics. This chapter concludes this research study, with the main aim of evaluating the system through management in eThekwini Municipality were able to use in designing, implementing and maintaining appropriate internal risk controls that minimizes the risk of uncertainties. The chapter gives a summary of the findings and also, make conclusion based on the elicited evidences, while making recommendations and suggestions for further studies.

To conclude this study, it is imperative to have a re-cap of the objectives that channeled this study.

5.2 Research Objectives

The under-listed objectives were observed by using a structured questionnaire that was given a response from employees in various departments of eThekwini Municipality.

- To establish the internal risk management control mechanisms and strategies that are in place in the various Departments of the eThekwini Municipality;
- To evaluate the effectiveness of the internal risk management control mechanisms and strategies of the eThekwini municipality.

5.3 Summary of issues and major findings

It is apparent from the study that eThekwini Municipality played a significant role in maintaining internal risks control mechanism through various departments. However, the following information emerged from the findings of this study.

- The findings revealed that poor risk management within any origination might lead to the organization experiencing risks that is associated with loss of assets, injury of staff on duty and damage to property. This suggests that in order for the eThekwini municipality to control and manage its risks they need to implement advanced an effective methods of

eliminating and minimizing risks. Consequently, risk management can be effectively managed by taking into consideration the methods of, risk avoidance, risk acceptance, risk transfer, risk reduction, risk identification, risk evaluation and risk control (Young, 2010: 22)

- It is obvious that organization are challenged with risk management which needed to be address under four elements of risk management namely risk identification, evaluation, control and monitoring (Visser and Erasmus, 2008: 59).
- The study revealed that there is no doubt that organizations are exposed to risk in each part of action, this suggest that before any consideration can be dealt with, it is important to first consider risk identification by discovering sources of risk within the organization (Valsamakis, Vivian and du Toit, 2000: 78)
- The outcome from the study revealed that risk would not be completely removed even if with the best and most effective financing plan. This imply that crisis management must be a vital component of a risk management plan (Madhu and Brady, 2014: 124).
- The Australian standards, ISO 31000 (2009) the ERM version of the COSO standard, British standards BS 3100:2011 all play a vital role in risk control. These standards set out the approach on how to manage risk (Hopkin, 2012: 56).
- The internal audit functions in South African municipalities has been discovered as one of the most valuable functions that are officially authorized to occur within any municipalities in South Africa. Additionally, this is regarded as an effective means of controlling municipalities' internal affairs.
- The study discovered five relevant internal control mechanisms that need to be implemented within any municipalities in South Africa. These are; control environment, risk assessment, control activities, information and communication and monitoring.

- The basic internal control measures that an organization should implement include; relevant record keeping processing and integration control, continuous reporting, complying with policies, relevant IT system controls, good audit committee, proper internal audit duties, proper risk management standards, current leadership culture, monitoring of performance, sound HR management, amended and up to date policies and procedures, clear action plans addressing any efficiency and sound IT governance (Damasiotis, Trivellas, Santouridis, Nikolopoulos and Tsifora, 2015: 538)
- The municipalities adopt and implement the internal control but the study revealed that municipalities still fail to account for their financial matters which should be maintained in order to minimize rise in costs and ensure accountability in government institutions.

5.4 Conclusions

- There is clear evidence that eThekwini Municipality have start to implement gender equality approach in all her policies, programmes and projects. Consequently, women are being empowered to partake in active services that give room for development of the region and change
- The study reveal that all of the respondents had a post-school qualifications which specify that, a fair proportion of the respondents have a higher qualification and the responses gathered was from an informed (learned) source. The impact of which is a good grand to eradicate poverty in region as knowledge is wealth.
- Furthermore, eThekwini Municipality might have programmes of risk awareness in place and implement it however, the identification step which is the most critical step in the process of risk management are still lacking of some knowledge with regards to the risk management process. In addition, the flow of communication that fosters good interpersonal relationship among the employees was not strong enough. In respect to this, many among employees have not fully fledge engage in active participation in risk management processes. This effect has a negative impact in the mind of the employees

because of their inability to articulate on whether their employment stability and job security is secured in the organization.

- More to the point, documentation plays an important role in the understanding of how the organization has been performing. Although, the record keeping were done in the Municipality, but comprehensive risk management process were not efficient enough. On the hand, negligence of duty should be taken serious especially, on the conduct of research that involves risk surveys, risk-discovery questionnaires that address all the properties, assets and major activities involving evaluate risk on an ongoing basis to ensure success and that it contributes to the goals and objectives of the institution.

5.5 Recommendations

The following recommendations are made based on the findings of this study

- It is recommended that eThekwini municipality should improve and maintain their policy compliance in order to ensure most effective control strategy that plays a major role in the organisation such as Public Finance Management Act (PFMA). Also, each an individual employees of the organization irrespective of gender, tribe or ethnicity must be given the opportunity to participate in services that initiate development and makes a positive change to the organization in the risk handling strategies.
- There is need for eThekwini Municipality to effectively implement COSO standards. These standards will assist the organisation in maintaining their integrated risk controls and effectiveness in controlling their internal risk. Above and beyond that, employees must be encouraged to add more values to themselves through educational knowledge, attend workshops for the purpose of promoting learning within the organization and inter-departmental activities.
- It is recommended that the Municipality must develop a plan for substitute actions that conduct, analyses the general internal control review, document the event in a proper good record keeping style that allows continuous implementation. More so, all staff must be

encourage to undergo training and adhere to municipal policies and procedures at all levels for the purpose of promoting risk control activities within the organisation.

- This study recommends that the municipalities may consider implementing improved systems such as British standards (BS) 3100, the Australian standards (AS) 4360 and the enterprise risk management version. These standards play a vital role in the internal control. These standards set out the approach as to how to manage risk. They also identify the critical framework for risk management control.
- This study recommends that the municipality should improve their internal control mechanisms such as: control activities information, communication and monitoring.

To this end, if the above recommendations were properly implemented, this will serve as a good stance where work efficiency is promoted particularly on risk management process.

5.6 RECOMMENDATIONS FOR FURTHER STUDY

- The study recommends future study that can look at the models of risk management in the South African context.
- The future study may also include the private sector as well as non-governmental organisations (NGOs) with large numbers.
- The future study may look at the action research in particular, ‘employees’ participation’ for the same topic as to make sure that everybody in the organisation participated.

REFERENCES

- Abor, J. O. 2013. Risk management in Ghanaian insurance industry. *qualitative research in financial markets*, 5 (1): 26-42.
- Adetiloye, K. A., Olokoyo, F. O. and Taiwo, J. N. 2016. Fraud prevention and Internal control in Nigerian Banking System. *International Joournal of Economics and Financial Issues*, 6 (3): 1172-1179.
- Agbejule, A. and Jokipii, A. 2009. "Strategy, control activities, monitoring and effectiveness". *Managerial Audting Journal*, 24 (6): 500-522.
- Aikins, S. K. 2009. Global financial crisis and government intervention: a case for effective regulatory governance. *International Public Management Review*, 10 (2): 23-43.
- Akdemir, E., Karameşe, E. N. and Arslan, A. 2015. Descriptive analysis of researches on curriculum development in education. *Procedia - Social and Behavioral Sciences*, 174 (2015): 3199-3203.
- Arwinge, A. 2013. *Internal control: a study of concept and themes*. Germany: Physical verlag.
- Australian Standard. 2003. *Fraud and corruption control*. Available: <https://www.saiglobal.com> (Accessed 23/1/2018).
- Aven, T. 2016. Risk assessment and risk management: Review of recent advances on their foundation. *European Journal of Operational Research*, 253 (1): 1-13.
- Ayagre, P., Appiah-Gyamerah, I. and Nartey, J. 2014. The effectiveness of Internal Control systems of banks: The case of Ghanaian banks. *International Journal of Accounting and Financial Reporting*, 4 (2): 377-389.

Barnes, S. J., Mattsson, J. and Sorensen, F. 2016. Remember experience and revisit intension: A longitudinal study. *Tourism Management*, 57 (2016): 286-294.

Bastaminia, A., Rezaei, M. R. and Dastoorpoor, M. 2017. Identification and evaluation of the components and factors affecting social and economic resilience in the city of Rudbar, Iran. *International Journal of Disaster Risk Reduction*, 22 (2017): 269-280.

Beasley, M., Branson, B. and Pagach, D. 2015. An Examination of the assessment of Top Risks on the Horizon: Evidence from Executives and Risk professionals. *The Journal of Enterprise Risk Management*, 1 (1): 6-27.

Berg, H. V. I. I. 2010. Risk Management: procedures, methods and experience. *RT&A*, 1 (17): 79-95.

Bhattacharjee, A. 2012. *Social Science Research: Principles, Methods and Practices*. 2nd ed. Tampa, Florida: Creative Common Attribution-Non-Commercial-Share Alike.

Bless, C., Higson-Smith, C. and Kagee, A. 2006. *Fundamentals of Social Research Methods: An African Perspective*. 2nd ed. Cape Town: Juta.

Bourne, L. 2016. Targeted communication: the key to effective stakeholder engagement. *Procedia - Social and Behavioral Sciences*, 226 (2016): 431-438.

Bozeman, B., Tech, G. and Kingsley, G. 1998. Risk culture in the public and private organization. *Public administration review*, 58 (2)

Bressler, M. S. 2009. The Impact of Crimes on Business: A Model of Preventing, Detection and Remedy. *Journal of Management and Marketing Research*, 2: 1-13.

Bromiley, P., McShane, M., Nair, A. and Rustambekov, E. 2015. Enterprise Risk Management: Review, Critique, and Research Directions. *Long Range Planning*, 48 (2015): 265-276.

Bubilek, O. 2017. Importance of Internal Audit and Internal Control in an organization - Case Study. Bachelor of Business Administration, International Business Degree Thesis.

Busch, N. E. and Givens, A. D. 2013. Achieving Resilience in Disaster Management: The role of Public-Private Partnerships. *Journal of Strategic Security*, 6 (2): 1-19.

Cagliano, A. C., Grimaldi, S. and Rafele, C. 2015. Choosing project risk management techniques. A theoretical framework. *Journal of Risk Research*, 18 (2): 232-248.

Collins, O. O. 2014. Effect of internal control on financial performance of micro-finance institutions in Kisumu central constituency, Kenya. *Scholarly Journal of Scientific Research and essay*, 3 (10): 139-155.

Committee of Sponsoring Organization of the trade way Commission. 2014. *Enterprise Risk Management Integrated Framework*. Available: www.Coso.org/ermupdate.html (Accessed

COSO enterprise risk management framework. 2004. Committee of sponsoring organizations of trade way commission.

Crosstalk. 2005. Risk management journal. *Journal of defense software engineering*, 18 (2)

Damasiotis, V., Trivellas, P., Santouridis, I., Nikolopoulos, S. and Tsifora, E. 2015. IT Competences for Professional Accountants. A review. *Procedia - Social and Behavioral Sciences*, 175 (2015): 537-545.

Dawson, C. 2002. *Practical Research Methods: A User Friendly Guide to Mastering Research Techniques and Projects*. London: How to Books Ltd. .

de Azevedo, R. C., Ensslin, L. and Jungle, A. E. 2014. A Review of Risk management in Construction: Opportunities for Improvement. *Modern Economy*, 5 (2014): 367-383.

Dionne, G. 2013. *Risk Management: History, Definition and Critique*. Canada: Interuniversity Research Centre on Enterprise networks, Logistics and Transportation.

Domokos, L., Nyéki, M., Jakovác, K., Németh, E. and Hatvani, C. 2015. Risk Analysis and Risk Management in the Public Sector and in Public Auditing. *Public Finance Quarterly*, 60 (1): 7-28.

Ennouri, W. 2013. Risk management: New Literature Review. *Polish Journal Management Studies*, 8 (2013): 288-297.

Fernandez, C. and Arrondo, R. 2005. Alternative Internal Controls as Substitutes of the Board of Directors. *Corporate Governance: an International Review*, 13 (6): 856-866.

Financial Reporting Council. 2014. Guidance on Risk management, Internal control and Related Financial and Business Reporting. *Guiding Corporate Governance*.

Fraser, J. R. S., Schoening, T., Karen, S. and Betty, J. 2008. Who Reads What Most Often? A Survey of Enterprise Risk Management Literature Read by Risk Executives. *Journal of Applied Finance*, 18 (1): 73-91.

Graham, L. 2008. *Internal controls: guidance for private, government and nonprofits entities*. New Jersey: John Wiley.

Guide 73. 2009. *Risk Management-Vocabulary*. Switzerland: International Organisation for Standardisation.

Gupter, P. K. 2010a. Risk management in India companies: EWRSM concerns and issues. *The Journal of Risk Finance*, 12 (2): 121-139.

Gupter, P. K. 2010b. Risk management in India companies: EWRSM concerns and issues. *The Journal of Risk Finance*, 12 (2): 121-139.

Gurenko, E. N., Itigin, A. and Wlechert, R. 2013. Insurance risk transfer and categorization of reinsurance contracts. *The Journal of Financial perspective*, 1 (3): 1-21.

Gutshwa, B. H. 2016. Risk culture in a South African government institution. Magister Commercii in Banking and Financial Risk Management North-West University. 23/8/2018).

Harris, A. 2000. Risk management in practice: how are we managing? . *British journal of clinical governance*, 5 (3): 142-149.

Hemingway, R. and Gunawan, O. 2018. The Natural Hazards Partnershihp: A Public-sector collaboration across the UK for natural hazar disaster risk reduction. *Iinternational Journal of Disaster Risk Reduction*, 27 (2018): 499-511.

Hood, J. and Smith, T. 2013. "Perception of quantifiable benefits of local authority risk management". *International Journal of Public Sector Management*, 26 (4): 309-319.

Hopkin, P. 2012. *Fundamentals of Risk Management: Understanding, evaluating and implementing effective risk management*. 2nd ed. United States: Kogan Page Limited.

International Federation of Accountant, O. A. O. 2012. *Effective governance, Risk Management and Internal Control* Available: www.ifac.org (Accessed 23/1/2018).

Iqbal, M. Z. and Akbar, S. 2015. Effectiveness of Performance Appraisal: An Integrated Framework. *International Journal of Management Reviews*, 17 (4): 510-533.

Jeremy, C. 1999. Stein Source. *The Journal of Business*, 69 (4): 429-455.

Jeseviciute-Ufartiene, L. 2014. Importance of Planning in Management Development Organization. *Journal of Advance Management Science*, 2 (3): 176-180.

Katuui, S. 2015. Managing records in South African's public sector - reivew of literature. *Journal of South African Society of Archivists*, 48 (2015): 1-13.

Khalid, S. and Bahtti, K. 2015. Entrepreneurial competence in managing partnerships and partnership knowledge exchange: Impact on performance difference in export expansion stages. *Journal of world Business*, 50 (2015): 598-608.

Knechel, W. R. 2016. Audit Quality and Regulation. *International Journal of Auditing*, 20 (3): 215-223.

Kokobe, S. A. and Gemechu, D. 2015. Risk management Techniques and Finanacial Perfomance of Insurance Companies. *International Journal of Accounting Research*, 4 (1): 1-5.

Kummuthinidevi, S. 2016. A study on Effectiveness of the Internal Control System in the Private Banks of Trincomalee. *International Journal of Scientific and research publications*, 6 (6): 600-612.

Kurata, J. and Hemmings, H. C. 2015. Memory and awareness in anaesthesia. *British Journal of Anaesthesia*, 115 (1): 1-13.

Lakis, V. and Giriūnas, L. 2012. The concept of internal control system: Theoretical Aspect. *Ekonomika*, 91 (2): 142-152.

Länsiluoto, A., Jokipii, A. and Eklund, T. 2016. "Internal control effectiveness: a Clustering approach". *Managerial Auditing Journal*, 31 (1): 5-34.

Lee, S., Workman, J. E. and Jung, K. 2016. Brand relationship and risk: influence of risk avoidance and gender on brand consumption. *Journal of Open Innovation: Technology, Market and Complexity*, 2 (14): 1-15.

Lewis, K. and Reicher, M. A. 2016. Web Applications for Patient Communication. *Journal of the American College of Radiology*, 13 (12): 1603-1607.

Li, Q., Wu, Y., Ojiako, U., Marshall, A. and Chipulu, M. 2014. Enterprise risk management and firm value within China's insurance industry. *AOSIS Open Journals*, 14 (1): 1-10.

Madhu, A. and Brady, C. 2014. Risk management and insurance review: Designing an Enterprise Risk Management curriculum for business studies. *Insight from a pilot programme*, 17 (1): 113-136.

mafunisa, M. J. 2014. Addressing public finance management skills shortage in South African public service. *Journal of Public Administration*, 49 (4): 1100-1112.

Mary, C. and Arm, G. 2009. *Operational risk management*. Zurich North America:

Mary, M., Albert, O and Byaruhanga, J. 2014. Effects of Internal Control Systems on Financial Performance of Sugarcane outgrower companies in Kenya. *Journal of Business and Management*, 16 (1): 62-73.

Modibbo, S. A. 2015. Impact of Internal audit Unit on the Effectiveness of Internal Control System of tertiary Education Institutions in Adamawa State Nigeria. *International Journal of Humanities social Sciences and Education*, 2 (5): 140-156.

Moloi, T. 2014. Disclosure of risk management practices in the top South Africa's mining companies: An annual/integrated report disclosure analysis African Journal of Business Management, 8 (17): 681-688.

Phuenngam, W. and Na Ranong, P. O. A. o. 2009. *Critical success factors for effective risk management procedure in Financial Industry*. Available: www.umu.divaportal.org/smash/get/diva2:233985?FULLTEXT01.pdf (Accessed 23/1/2018).

Picket, K. H. 1999. "The manager's guide to internal control: diary of a control freak". *Management Decision*, 37 (2): 93-215.

Ramukumba, T. 2014. Overcoming Smes Challenges Through Critical Success Factors: A Case Of Smes In The Western Cape Province, South Africa. *Economic and Business Review for Central and South - Eastern Europe*, 16 (1): 19-38.

Rao, K. and Subramaniam, N. 2008. "Quality of internal control procedures: Antecedents and moderating effect on organisational justice and employee fraud". *Managerial Auditing Journal*, 23 (2): 104-124.

Rasmussen, J. 1997. Risk management in a dynamic society: a modelling problem. *Safety Science*, 27 (3): 183-213.

Reising, D. L., Carr, D. E., Gindling, S., Barnes, R., Garletts, D. and Ozdogan, Z. 2017. An analysis of interprofessional communication and teamwork skill acquisition in simulation. *Journal of Interprofessional Education & Practice*, 8 (2017): 80-85.

Renner, K., Schneiderbauer, S., Pruß, F., Kofler, C., Martin, D. and Cockings, S. 2018. Spatio-temporal population modelling as improved exposure information for risk assessments tested i the Autonomous Province of Bolzano. *International Journal of Disaster Risk Reduction*, 27 (2018): 470-479.

Robertson, A. 2013. On the Function of the Law of Neligence. *Oxford Journal of legal Studies*, 33 (1): 31-57.

Rodrigues-daa-Silva, L. H. 2014. The Project Risk Management Process, a Preliminary Study. *Procedia technology*, 16 (Procedia Technology): 943-949.

Sadgrove, K. 1996. *The Complete Guide to Business Risk Management*. Aldershot: Gower.

Salleh, K. M. and Sulaiman, N. L. 2015. Technical Skills Evaluation Based on Competency Model for Human Resources Development in Technical and Vocational educational. *Asian Social Science*, 11 (16): 74-79.

Schmit, N. G. 2016. Supporting strategic success through enterprise-wide reputation risk management. *Journal of risk finance*, 17 (1): 26-45.

Scholtz, B. J. 2015. *Exploring the importance of internal control mechanisms in attaining a clean audit: The case of Sedibeng municipality*. North West University:

Shabri, S. M., Saad, R. A. and Bakar, A. A. 2016. The Effect of Internal Control Systems on Cooperative's Profitability: A case of Koperrasi ABC Berhad. *International Review of management and marketing*, 6 (S8): 240-245.

Shamsuddin, N. and Johari, N. 2014. The effect of internal audit towards internal control system effectiveness. Paper presented at the *E-proceedings of the conference on Management and Muamalah*. 301-308.

Sharma, C. O. 2006. The relative effects of elements of internal control on Audits, evaluation of internal control. *Pacific accounting review*, 18 (2): 69-96.

Simon, M. K. 2011. *Assumptions, Limitations and Delimitations*. Available: www.dissertationrecipes.com (Accessed 22/1/2018).

Sommer, D. W., Trieschmann, J. S. and Hoyt, R. 2005. *Risk management and insurance*. 12 ed. South Western: Thomson Publication.

Stan-Maduka, E. 2010. "The impact of risk management practice on the development of African businesses". *World Journal of Entrepreneurship, Management and Sustainable Development*, 6 (3): 213-219.

Tchankova, L. 2002. Risk identification- basic stage in risk management, environmental management and health. 13 (3): 290-297.

The Institute of Directors in Southern Africa and the King Committee on governance. 2009. Available: https://en.wikipedia.org/wiki/King_Report_on_Corporate_Governance (Accessed 23/1/2018).

Toosarvandanni, M. S., Modiri, N. and Afzali, M. 2012. The risk assessment and treatment approach in order to provide LAN security based on ISMS Standard. *International Journal in Foundation of Computer Science and Technology*, 2 (6): 15-36.

Toth, T. and Sebeten, Z. 2014. Integrated Risk Management Process for Building Projects. *Procedia Engineering*, 85 (2014): 510-519.

Trochim, W. K. 2006. *Research Design: Social Research Methods*. . 1st ed. Leeds University.

Tsheletsane, I. and Fourie, D. 2014. Factors indering public financial management and accountability in South Africa. *African Journal of Public Affairs*, 7 (4): 42-56.

Valsamakis, A. C., Vivian, R. W. and du Toit, G. S. 2000. *Risk Management*. 2nd ed. Sandton: Heinemann Publishers.

Valsamakis, A. C., Vivian, R. W. and du Toit, G. S. 2005. *Risk management: Managing enterprise risk*. 3rd ed. Sandton: Heinemann.

Valsamakis, A. C., Vivian, R. W. and du Toit, G. S. 2010a. *Risk Management*. 4th ed. Sandton: Heinemann Publishers (pty) Ltd.

Valsamakis, A. C., Vivian, R. W. and du Toit, G. S. 2010b. *Risk Management*. 4th ed. Sandton: Heinemann Publishers (pty) Ltd.

Van der Nest, D., Thornhill, C. and de Jager, J. 2008. Audit committees and accountability in the South African public sector. *Journal of Public Administration*, 43 (4): 545-557.

Verbano, C. and Venturini, K. 2013. Managing Risks in SMEs: A Literature Review and Research Agenda. *Journal of Technology and management & Innovation*, 8 (3): 186-197.

Visser, C. B. and Erasmus, P. W. 2008. *The management of public finance: A practical guide* Cape Town: Oxford University press.

Wallace, W. and McClure, N. 2012. *Strategic risk management, Edinburg*. Available: <https://www.ebsglobal.net/documents/course-testers/english/pdf/h17> (Accessed

White paper on transforming service delivery. 1999.

Wiid, J. A. and Diggines, C. 2013. *Marketing Research*. 2nd ed. Cape Town: Juta & Company Limited.

Williams, J. R., Smith, L. and Young, P. C. 1998. *Risk Management and Insurance*. 18th ed. Singapore: Irwin/McGraw-Hill.

Yao, P. L., Yusheng, K. and Bah, F. B. M. 2017. A critical Examination of Internal Control System in the Public Sector, A Tool for Alleviating Financial Irregularities: Evidence from Ghana. *Research Journal of Finance and Accounting*, 8 (22): 94-110.

Young, J. 2010. *Operational risk management and insurance: the practical application of a qualitative*. 18 ed. Pretoria: Van Schaik Publishers.

Zubair, A., Bashir, M., Abrar, M., Baig, S. A. and Hassan, S. Y. 2015. Employee's Participation in Decision Making and Manager's Encourage of Creativity: The Mediating Role of Climate for Creativity and Change. *Journal of Service Science and Management*

8(2015): 306-321.

Zulu, Z. 2006. Selecting an appropriate organizational performance management system for South African municipalities. Durban University of technology.

Appendix 1



Shell House
221 Anton Lembede Street, Durban , 4001
Tel: 031 311 3192, Fax: 031 311 3292
www.durban.gov.za

06 May 2016

ATT: ZINHLE KHUMALO

RE: AUTHORITY TO DO RESEARCH IN THE ETHEKWINI MUNICIPALITY

Your letter dated 06 May 2016 requesting to do research on Master's in Public Management Degree has reference.

You are hereby informed that you are granted authority to do research as requested. You are reminded of the ethics which have to be prioritized when engaging our employees on this research. Please contact the relevant units for all other logistics.

Regards

/Date/...!*...'".../:'... ..

[REDACTED]

Dr M.B. Ngubane

Head: EThekwini Municipal Academy



Pod £, Sacond floor, 7ntuthuko 3unctTon, 75O f4ary Thiphe Street, Umkh umbane, Nato Nan or
Durban 400T+Tel• O3I 322 45:t3, tax: o3t 26a 34O5, Fax to email: 0g6 265 7160, EmaT:
mTle6durlan.gov.za, Website.

forattention:

Chain Research

Ethics Committee

Faculty af Publ]c

Management Durban

University of

technology ML

Sultan Campus

Durban

4001

6th May2016

RE: LETTER OF SUPPORT TO STUDENT ZINHLE PRETTY KHUMALO, STUDENT NUMBER 20810184 -
GRANTING PERMISSION TO USE EIHEKWINI MUNICIPALITY AS A CASE STUDY

Please be informed that eT]lekwin Municipality Audit and ftisk Management Services (EMARAS) in
partnership with the eThekwin Municipa Academy (EMA), have considered the request by Ms Z.P
Khumalo to use eThekwin Municipality as a research study site lending to the awarding of a Masters
in Public Management degree entitled "An investigation o/ internal risf control mechanism *within*
the *various departments* o/ eTHEkwin Municipality

We wish to inform Ms Z.P I(humalo of the acceptance of her request and hereby assure her of
our utmost cooperation towards achieving her academic goals; the outcome which we believe will
help our municipality in the long run. In return, we stipulate as conditional, that Ms Z.P.I(humalo
presents the results and recommendations of this stud to the related unit/s on completion.

Wishing the best in her studies.

Head : E S
eThekwini Municipality

[REDACTED]

6/05/2016

Date



Head: EMA
eThekwinl Municipality

Appendix 2: Cover letter for the questionnaires



Faculty of Management Sciences

Department of Public Management & Economics

Date: 22 April 2016

Dear participant

LETTER OF INFORMATION

Title of the Research Study: An investigation of internal risk control mechanism within the various departments of eThekwini Municipality

Principal researcher: Khumalo Zinhle Pretty

Co-Investigator/s/supervisor/s: Dr. L Lekhanya

Brief Introduction and Purpose of the Study:

The study intends to investigate the current internal risks control mechanism within the various departments of eThekwini Municipality. Organizations need to first identified their risks then come up with relevant internal risk controls that seek minimize risks hence it is effective to follow risk

management processes and methods of discovering potential risks. Therefore, the research will examine the current risk control mechanisms within the various departments of eThekweni Municipality with a view of ascertaining their effectiveness. The recommendations will incorporate relevant strategies that might be effective to mitigate risks.

Data will be collected by means of a questionnaire and interviews. Questionnaire should take between 20-30 minutes to complete and the interviews should be completed in an hour's time. There are no risks and direct benefits involve in participating in the study. If participants feel they are uncomfortable in answering the questions they can withdraw themselves from the study and they can do so without having any implications. No remuneration will be given to any participants and there are no costs attached to the study. The questionnaire does not force participants to give their names; therefore, participant confidentiality is guaranteed. All the information will be kept under control system as in accordance to DUTs Institutional Research Ethics Committee (IREC) requirements. No participants will be injured during the participation of this study as it will require the answering of a questionnaire and interviews will be conducted in a non-violent manner.

Persons to Contact for Queries:

STUDENT

Khumalo Zinhle Pretty

Mobile no: 0749961464/0844209176

Work no: None

Email: Zkhumalo34@yahoo.com

SUPERVISOR

Dr. Laurence Lekhanya

Mobile no: 079 757 1631

Work no: (031) 260 7480

Email: lawrencel@dut.ac.za

Appendix 3: Consent form



CONSENT

Statement of Agreement to Participate in the Research Study:

- I hereby confirm that I have been informed by the researcher, Khumalo Zinhle Pretty, about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number: _____,
- I have also received, read and understood the above written information (Participant Letter of Information) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerized system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

Full Name of Participant	Date	Time	Signature / Right Thumbprint
---------------------------------	-------------	-------------	-------------------------------------

I, Khumalo Zinhle Pretty herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

Khumalo Zinhle Pretty _____

Full Name of Researcher	Date	Signature
--------------------------------	-------------	------------------

Full Name of Witness (If applicable)	Date	Signature
---	-------------	------------------

Full Name of Legal Guardian (If applicable)	Date	Signature
--	-------------	------------------

Appendix 4: Questionnaires

Questionnaire for ordinary employees

Annexure A –Survey Questionnaire and Interview schedule

This interview schedule is being administered in completion of a Master’s degree in Public Management. The purpose of this study is to investigate the current internal risks control mechanism within the various departments of eThekwin Municipality and assist risk management department to implement strategies that seek to prevent, minimize and eliminate risk through following relevant risk management processes and methods.

This research is confidential, anonymous and no specific reference will be made to information given by respondents.

Section A- Demographics

- 1 Name of Department_____
- 2 Age (Tick One)
☐ Under 25

☐ 26 – 30

☐ 31-35

☐ Over 36
- 3 Gender (Tick) ☐ Male ☐ Female
4. Level of Education_____
5. Length of Service _____
6. Grade_____

7. Position_____

Section B- Quantitative Questions

- 4 Are you aware of any potential risks within your Department?
- ☐Yes ☐No
- 5 Does your Department conduct risk management processes such as risk identification, measurement, risk control and risk evaluation?
- ☐Yes ☐No ☐ I don't know
- 6 Are you aware of different types of risks within this Department?
- ☐Yes ☐No
- 7 Have you ever been involved in any risk while you were still on duty and do you feel safe here?
- ☐Yes ☐No
- 8 Refer from the above question, do you think enough securities/risk control was effectively implemented and the potential of risk were minimized/reduced?
- ☐Yes ☐No
- 9 How many times have the above mentioned risk occurred in the last five years?
- ☐1 ☐2 ☐3 ☐4 ☐more than 5
- 10 Does your Department conduct risk identification continuously and how often?
- ☐Yes ☐No
- daily☐ weekly☐ monthly☐ quarterly☐ yearly☐
- 11 Does your Department have a comprehensive record keeping in risk management programmes?

☐Yes ☐No

- 12 Does your Department conduct risk inspections that involve visit to areas where the activities and the department's delivery of services is undertaken?

☐Yes ☐No

- 13 Does your Department conduct research on risk that involves surveys, risk-discovery questionnaires that address all the properties, assets and major activities of your department?

☐Yes ☐No

- 14 Does your Department currently have effective risk reduction such as physical devices and procedural measures including the installation of security locks, bars, and alarms to detect thieves?

☐Yes ☐No

- 15 Does your organization conduct risk reductions through organizational planning that include the use of educational programmes, business planning, educating staff about the causes and consequences of loss continuously and how often is being undertaken?

☐Yes ☐No

daily☐ weekly☐ monthly☐ quarterly☐ yearly☐

- 16 Does your Department evaluate risk on an ongoing basis to ensure success and that it contributes to the goals and objectives of the institution?

☐Yes ☐No

- 17 Does your Department have a well establish risk management programmes that is based on three critical components: centralized unit, trained staff, formal management and good record keeping?

☐Yes ☐No

Interview schedule for management

Section c – Interview Schedule

2. Which risks do you think have the high, low medium frequently in your Department?

Example

Types of risks	High	Medium	Low
Theft	X		
Fraud		X	
Injury to staff			X

Types of risk	High	Medium	Low

- 2 Does your Department implement procedural controls that include physical, Authorization and Accounting, Please explain how?

--

- 3 Internal control measures should be present within any system: directive, detective, corrective, compensating and constructive they are designed to carry out various

functions that seek to prevent risk, please explain if they are effectively implemented within your department and how?

- 4 The focus of implementing and maintaining internal control systems should be accomplishing goals and objective of the organization. Explain how management implements internal control system within your department?

- 5 Does your organization conduct internal control process such as organize, conduct vulnerable assessment, develop plan for subsequent action conduct internal control review etc?

- 5 Internal control mechanism should be based on certain principles ensuring that they add value to the organization, please explain if your department implemented general principles such as proof of security measures, adequate safe guarding of assets, and proper accounting for transaction?

- 6 Does your Department conduct macro and micro-risk identification and to what extent?

- 6 Describe any types of risk that are often experienced in your Department and to what extent. **e.g. injured on duty, twice a month?**

- 7 Please explain if your department utilizes methods of risk control, risk avoidance, risk financing and risk transfer, to effectively handle risk?

- 8 Does your Department conduct programmes such as learning and awareness on risk management and how often?

- 9 Does risk management staff attend risk trainings continuously?

- 10 Do you think the current risk internal controls that seek to minimize, avoid and prevent risk within your Department are currently serving the purpose?

Thank You Very Much

Appendix 5: Frequency tables (qualitative)

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	31 - 35	2	25.0	25.0	25.0
	Over 35	6	75.0	75.0	100.0
	Total	8	100.0	100.0	

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	6	75.0	75.0	75.0
	Female	2	25.0	25.0	100.0
	Total	8	100.0	100.0	

Level of Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Diploma	2	25.0	25.0	25.0
	Degree	5	62.5	62.5	87.5
	PhD	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Department

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Expenditure	1	12.5	12.5	12.5
	Financial Administration	1	12.5	12.5	25.0
	Housing	1	12.5	12.5	37.5
	Libraries and Heritage	1	12.5	12.5	50.0
	Performance and Risk management	1	12.5	12.5	62.5
	Real Estate	1	12.5	12.5	75.0
	Speaker's Office / Coucillor Support	1	12.5	12.5	87.5
	Water and Sanitation	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Level of Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Diploma	2	25.0	25.0	25.0
	Degree	5	62.5	62.5	87.5
	PhD	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Length of Service

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5.00	1	12.5	12.5	12.5
	6.00	1	12.5	12.5	25.0
	10.00	2	25.0	25.0	50.0
	17.00	1	12.5	12.5	62.5
	18.00	1	12.5	12.5	75.0
	21.00	1	12.5	12.5	87.5
	27.00	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Grade

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10.00	1	12.5	12.5	12.5
	12.00	2	25.0	25.0	37.5
	16.00	3	37.5	37.5	75.0
	17.00	1	12.5	12.5	87.5
	20.00	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

		Position			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Communications Manager	1	12.5	12.5	12.5
	Director	3	37.5	37.5	50.0
	Finance Manager	1	12.5	12.5	62.5
	Senior Administrator	2	25.0	25.0	87.5
	Senior Manager	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

	Frequency	Percent
Communications Manager	1	12.5
Director	3	37.5
Finance Manager	1	12.5
Senior Administrator	2	25.0
Senior Manager	1	12.5
Total	8	100.0

Theft

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High	1	12.5	50.0	50.0
	Medium	1	12.5	50.0	100.0
	Total	2	25.0	100.0	
Missing	System	6	75.0		
Total		8	100.0		

	High	Medium	Low	None
Theft	12.5	12.5		
Absenteeism	12.5			
Fraud	25.0	12.5	12.5	
Outdated F	12.5			
Insufficient Staff		12.5		
Non-Comp	12.5			
Political Interference		12.5		
Injury of Staff		12.5		
None				37.5

Absenteeism

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High	1	12.5	100.0	100.0
Missing	System	7	87.5		
Total		8	100.0		

Fraud

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High	2	25.0	50.0	50.0
	Medium	1	12.5	25.0	75.0
	Low	1	12.5	25.0	100.0
	Total	4	50.0	100.0	
Missing	System	4	50.0		
Total		8	100.0		

Outdated Practice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High	1	12.5	100.0	100.0
Missing	System	7	87.5		
Total		8	100.0		

Insufficient Staff

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Medium	1	12.5	100.0	100.0
Missing	System	7	87.5		
Total		8	100.0		

Non-Compliance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High	1	12.5	100.0	100.0
Missing	System	7	87.5		
Total		8	100.0		

Political Interference

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Medium	1	12.5	100.0	100.0
Missing	System	7	87.5		
Total		8	100.0		

Injury of Staff

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Medium	1	12.5	100.0	100.0
Missing	System	7	87.5		
Total		8	100.0		

None

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	3	37.5	100.0	100.0
Missing	System	5	62.5		
Total		8	100.0		

Quantitative frequency

		Department			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Councillor Support	1	12.5	12.5	12.5
	Expenditure	1	12.5	12.5	25.0
	Financial Administration	1	12.5	12.5	37.5
	Housing	1	12.5	12.5	50.0
	Libraries and Heritage	1	12.5	12.5	62.5
	Performance and Risk	1	12.5	12.5	75.0
	Real Estate	1	12.5	12.5	87.5
	Water and Sanitation	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	26 – 30	1	12.5	12.5	12.5
	31 – 35	4	50.0	50.0	62.5
	Over 35	3	37.5	37.5	100.0
	Total	8	100.0	100.0	

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	3	37.5	37.5	37.5
	Female	5	62.5	62.5	100.0
	Total	8	100.0	100.0	

Level of Education					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Certificate	2	25.0	25.0	25.0

Diploma	4	50.0	50.0	75.0
Degree	2	25.0	25.0	100.0
Total	8	100.0	100.0	

Length of Service					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.00	1	12.5	12.5	12.5
	4.00	1	12.5	12.5	25.0
	5.00	1	12.5	12.5	37.5
	6.00	2	25.0	25.0	62.5
	10.00	1	12.5	12.5	75.0
	15.00	1	12.5	12.5	87.5
	19.00	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Grade					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7.00	1	12.5	12.5	12.5
	8.00	2	25.0	25.0	37.5
	10.00	2	25.0	25.0	62.5
	12.00	3	37.5	37.5	100.0
	Total	8	100.0	100.0	

Position					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Accounting Officer	1	12.5	12.5	12.5

Building Maintenance Officer	1	12.5	12.5	25.0
Executive Secretary	1	12.5	12.5	37.5
Professional Property Valuer	1	12.5	12.5	50.0
Senior Administrator	1	12.5	12.5	62.5
Senior Financial Officer	1	12.5	12.5	75.0
Senior IT Technician	1	12.5	12.5	87.5
Senior Performance and Risk Officer	1	12.5	12.5	100.0
Total	8	100.0	100.0	

Are you aware of any potential risks within your Department?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	7	87.5	87.5	87.5
	No	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Does your Department conduct risk management processes such as risk identification, measurement, risk control and risk evaluation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	5	62.5	62.5	62.5
	No	2	25.0	25.0	87.5
	I don't know	1	12.5	12.5	100.0
	Total	8	100.0	100.0	

Are you aware of different types of risks within this Department?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	7	87.5	87.5	87.5
	No	1	12.5	12.5	100.0

Total	8	100.0	100.0	
-------	---	-------	-------	--

Have you ever been involved in any risk while you were still on duty and do you feel safe here?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	3	37.5	37.5	37.5
	No	5	62.5	62.5	100.0
	Total	8	100.0	100.0	

Refer from the above question, do you think enough securities/risk control was effectively implemented and the potential of risk were minimized/reduced?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	4	50.0	50.0	50.0
	No	4	50.0	50.0	100.0
	Total	8	100.0	100.0	

How many times have the above mentioned risk occurred in the last five years?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1	12.5	14.3	14.3
	1	2	25.0	28.6	42.9
	2	2	25.0	28.6	71.4
	5+	2	25.0	28.6	100.0
	Total	7	87.5	100.0	
Missing	System	1	12.5		
Total		8	100.0		

Does your Department conduct risk identification continuously and how often?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	4	50.0	50.0	50.0
	No	4	50.0	50.0	100.0

Total	8	100.0	100.0	
-------	---	-------	-------	--

Frequency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	1	12.5	33.3	33.3
	Weekly	1	12.5	33.3	66.7
	Yearly	1	12.5	33.3	100.0
	Total	3	37.5	100.0	
Missing	System	5	62.5		
Total		8	100.0		

Does your Department have a comprehensive record keeping in risk management programmes?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	4	50.0	50.0	50.0
	No	4	50.0	50.0	100.0
	Total	8	100.0	100.0	

Does your Department conduct risk inspections that involve visit to areas where the activities and the department's delivery of services is undertaken?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	4	50.0	50.0	50.0
	No	4	50.0	50.0	100.0
	Total	8	100.0	100.0	

Does your Department conduct research on risk that involves surveys, risk-discovery questionnaires that address all the properties, assets and major activities of your department?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	2	25.0	25.0	25.0
	No	6	75.0	75.0	100.0
	Total	8	100.0	100.0	

Does your Department currently have effective risk reduction such as physical devices and procedural measures including the installation of security locks, bars, and alarms to detect

thieves?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	7	87.5	100.0	100.0
Missing	System	1	12.5		
Total		8	100.0		

Does your organization conduct risk reductions through organizational planning that include the use of educational programmes, business planning, educating staff about the causes and consequences of loss continuously and how often is being undertaken?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	5	62.5	62.5	62.5
	No	3	37.5	37.5	100.0
	Total	8	100.0	100.0	

Frequency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Weekly	1	12.5	25.0	25.0
	Monthly	2	25.0	50.0	75.0
	Yearly	1	12.5	25.0	100.0
	Total	4	50.0	100.0	
Missing	System	4	50.0		
Total		8	100.0		

Does your Department evaluate risk on an ongoing basis to ensure success and that it contributes to the goals and objectives of the institution?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	3	37.5	37.5	37.5
	No	5	62.5	62.5	100.0
	Total	8	100.0	100.0	

Does your Department have a well establish risk management programmes that is based on three critical components: centralized unit, trained staff, formal management and good record keeping?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	4	50.0	50.0	50.0
	No	4	50.0	50.0	100.0
	Total	8	100.0	100.0	

	Frequency	Percent
Councillor Support	1	12.5
Expenditure	1	12.5
Financial Administration	1	12.5
Housing	1	12.5
Libraries and Heritage	1	12.5

Performance and Risk	1	12.5
Real Estate	1	12.5
Water and Sanitation	1	12.5
Total	8	100.0

Appendix E: Chi-Square tests

Quantitative

Chi-Square

	Chi-Square	df	Asymp. Sig.	Exact Sig.	Point Probability
Age	1.75	2	0.417	0.552	0.256
Gender	0.5	1	0.480	0.727	0.438
Level of Education	1	2	0.607	0.744	0.192
Length of Service	0.75	6	0.993	1.000	0.024
Grade	1	3	0.801	0.962	0.308
Are you aware of any potential risks within your Department?	4.5	1	0.034	0.070	0.063
Does your Department conduct risk management processes such as risk identification, measurement, risk control and risk evaluation?	3.25	2	0.197	0.296	0.154
Are you aware of different types of risks within this Department?	4.5	1	0.034	0.070	0.063
Have you ever been involved in any risk while you were still on duty and do you feel safe here?	0.5	1	0.480	0.727	0.438
Refer from the above question, do you think enough securities/risk control was effectively implemented and the potential of risk were minimized/reduced?	0	1	1.000	1.000	0.273
How many times have the above-mentioned risk occurred in the last five years?	0.429	3	0.934	1.000	0.154
Does your Department conduct risk identification continuously and how often?	0	1	1.000	1.000	0.273

Frequency	0	2	1.000	1.000	0.222
Does your Department have a comprehensive record keeping in risk management programmes?	0	1	1.000	1.000	0.273
Does your Department conduct risk inspections that involve visit to areas where the activities and the department's delivery of services is undertaken?	0	1	1.000	1.000	0.273
Does your Department conduct research on risk that involves surveys, risk-discovery questionnaires that address all the properties, assets and major activities of your department?	2	1	0.157	0.289	0.219
Does your organization conduct risk reductions through organizational planning that include the use of educational programmes, business planning, educating staff about the causes and consequences of loss continuously and how often is being undertaken?	0.5	1	0.480	0.727	0.438
Frequency	0.5	2	0.779	1.000	0.444
Does your Department evaluate risk on an ongoing basis to ensure success and that it contributes to the goals and objectives of the institution?	0.5	1	0.480	0.727	0.438
Does your Department have a well establish risk management programmes that is based on three critical components: centralized unit, trained staff, formal management and good record keeping?	0	1	1.000	1.000	0.273

Appendix F: Cross-tabulations

Quantitative

Are you aware of any potential risks within your Department? * Department												
Crosstab												
		Department								Total		
		Municipal Services	Supervision	Expenditure	Administrative	Housing	Utilities and Home Maintenance	Real Estate	Water and Sanitation			
Are you aware of any potential risks within your Department?	Yes	Count	1	1	1	1	1	1	0	1	7	
		% within Department	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	87.5%
		% of Total	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	0.0%	12.5%	87.5%
	No	Count	0	0	0	0	0	0	0	1	0	1
		% within Department	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	12.5%
		% of Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.5%	0.0%	12.5%
Total	Count	1	1	1	1	1	1	1	1	1	8	
	% within Department	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
	% of Total	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	12.5%	100.0%	
Chi-Square Tests												
	Value	df	Significance		Sig. (2-sided)							
Pearson Chi-Square	8.000 ^a	7	0.333	1.000								
Likelihood Ratio	6.028	7	0.536	1.000								
Fisher's Exact Test	8.864			1.000								
N of Valid Cases	8											
a. 16 cells (100.0%) have expected count less than 5.												

Are you aware of any potential risks within your Department? * Age						
Crosstab						
		Age			Total	
		26 - 30	31 - 35	Over 35		
Are you av	Yes	Count	1	3	3	7
		% within A	100.0%	75.0%	100.0%	87.5%
		% of Total	12.5%	37.5%	37.5%	87.5%
	No	Count	0	1	0	1
		% within A	0.0%	25.0%	0.0%	12.5%
		% of Total	0.0%	12.5%	0.0%	12.5%
Total	Count	1	4	3	8	
	% within A	100.0%	100.0%	100.0%	100.0%	
	% of Total	12.5%	50.0%	37.5%	100.0%	
Chi-Square Tests						
	Value	df	Significanct Sig. (2-sigt Sig. (1-siint Probabil			
Pearson C	1.143 ^a	2	0.565	1.000		
Likelihood	1.530	2	0.465	1.000		
Fisher's Ex	1.731			1.000		
Linear-by-L	.143 ^b	1	0.705	1.000	0.625	0.500
N of Valid	8					
a. 6 cells (100.0%) have expected count less than 5. The minimum expected						
b. The standardized statistic is -.378.						

Are you aware of any potential risks within your Department? * Gender						
Crosstab						
		Gender		Total		
		Male	Female			
Are you av	Yes	Count	3	4	7	
		% within G	100.0%	80.0%	87.5%	
		% of Total	37.5%	50.0%	87.5%	
	No	Count	0	1	1	
		% within G	0.0%	20.0%	12.5%	
		% of Total	0.0%	12.5%	12.5%	
Total		Count	3	5	8	
		% within G	100.0%	100.0%	100.0%	
		% of Total	37.5%	62.5%	100.0%	
Chi-Square Tests						
	Value	df	Significant Sig. (2-sided Sig. (1-sided Probability			
Pearson C	.686 ^a	1	0.408	1.000	0.625	
Continuity	0.000	1	1.000			
Likelihood	1.024	1	0.312	1.000	0.625	
Fisher's Exact Test				1.000	0.625	
Linear-by-L	.600 ^c	1	0.439	1.000	0.625	0.625
N of Valid	8					
a. 4 cells (100.0%) have expected count less than 5. The minimum expected						
b. Computed only for a 2x2 table						
c. The standardized statistic is .775.						

Are you aware of any potential risks within your Department? * Level of Education						
Crosstab						
		Level of Education			Total	
		Certificate	Diploma	Degree		
Are you av	Yes	Count	1	4	2	7
		% within L	50.0%	100.0%	100.0%	87.5%
		% of Total	12.5%	50.0%	25.0%	87.5%
	No	Count	1	0	0	1
		% within L	50.0%	0.0%	0.0%	12.5%
		% of Total	12.5%	0.0%	0.0%	12.5%
Total		Count	2	4	2	8
		% within L	100.0%	100.0%	100.0%	100.0%
		% of Total	25.0%	50.0%	25.0%	100.0%
Chi-Square Tests						
	Value	df	Significanct Sig. (2-sigt Sig. (1-siint Probability			
Pearson C	3.429 ^a	2	0.180	0.500		
Likelihood	3.256	2	0.196	0.500		
Fisher's E	2.830			0.500		
Linear-by-L	1.316 ^b	1	0.251	0.500	0.250	0.250
N of Valid	8					
a. 6 cells (100.0%) have expected count less than 5. The minimum expected						
b. The standardized statistic is -1.147.						

Are you aware of any potential risks within your Department? * Length of Service										
Crosstab										
		Length of Service							Total	
		3.00	4.00	5.00	6.00	10.00	15.00	19.00		
Are you av	Yes	Count	1	1	1	2	0	1	1	7
		% within L	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%	87.5%
		% of Total	12.5%	12.5%	12.5%	25.0%	0.0%	12.5%	12.5%	87.5%
	No	Count	0	0	0	0	1	0	0	1
		% within L	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	12.5%
		% of Total	0.0%	0.0%	0.0%	0.0%	12.5%	0.0%	0.0%	12.5%
Total	Count	1	1	1	2	1	1	1	8	
	% within L	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	
	% of Total	12.5%	12.5%	12.5%	25.0%	12.5%	12.5%	12.5%	100.0%	
Chi-Square Tests										
	Value	df	Significanct Sig. (2-sigt Sig. (1-siint Probability							
Pearson C	8.000 ^a	6	0.238	0.750						
Likelihood	6.028	6	0.420	0.750						
Fisher's E	7.796			0.750						
Linear-by-L	.078 ^b	1	0.780	1.000	0.375	0.125				
N of Valid	8									
a. 14 cells (100.0%) have expected count less than 5. The minimum expected										
b. The standardized statistic is .280.										

Are you aware of any potential risks within your Department? * Grade							
Crosstab							
		Grade				Total	
		7.00	8.00	10.00	12.00		
Are you aware of any potential risks within your Department?	Yes	Count	1	2	1	3	7
		% within Grade	100.0%	100.0%	50.0%	100.0%	87.5%
		% of Total	12.5%	25.0%	12.5%	37.5%	87.5%
	No	Count	0	0	1	0	1
		% within Grade	0.0%	0.0%	50.0%	0.0%	12.5%
		% of Total	0.0%	0.0%	12.5%	0.0%	12.5%
Total	Count	1	2	2	3	8	
	% within Grade	100.0%	100.0%	100.0%	100.0%	100.0%	
	% of Total	12.5%	25.0%	25.0%	37.5%	100.0%	
Chi-Square Tests							
	Value	df	Significant Sig. (2-sided Sig. (1-sided Probability				
Pearson Chi-Square	3.429 ^a	3	0.330	0.625			
Likelihood Ratio	3.256	3	0.354	0.625			
Fisher's Exact Test	3.492			0.625			
Linear-by-Linear Association	.004 ^b	1	0.948	1.000	0.625	0.250	
N of Valid Cases	8						
a. 8 cells (100.0%) have expected count less than 5. The minimum expected							
b. The standardized statistic is .066.							

Are you aware of any potential risks within your Department? * Position

Crosstab

		Accounting Officer	
Are you aware of any potential risks within your Department?	Yes	Count	1
		% within Position	100.0%
		% of Total	12.5%
	No	Count	0
		% within Position	0.0%
		% of Total	0.0%
Total	Count		1
	% within Position		100.0%
	% of Total		12.5%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	8.000 ^a	7	0.333
Likelihood Ratio	6.028	7	0.536
Fisher's Exact Test	8.864		
N of Valid Cases	8		

a. 16 cells (100.0%) have expected count less than 5. The minimum expected count is .13.

