

MAKERERE UNIVERSITY

**OPERATIONAL RISK MANAGEMENT, ORGANIZATIONAL ENVIRONMENT AND
ORGANIZATIONAL PERFORMANCE AT STANBIC BANK UGANDA LIMITED**

BY

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DECLARATION

I, Grace A. Nabweteme Sewanyana declare that this research report is my own original work, and it has never been presented for any award at any institution of higher learning.

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APPROVAL

This is to certify that this dissertation has been submitted for examination with our approval as university supervisors.

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Supervisor

DEDICATION

This work is dedicated to my family; my husband, Mr. W. Sewanyana, my son Kevin and daughters, Michelle, Irene, and Nancy for the kind support during my studies.

May God reward you abundantly.

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Most of all, I thank the almighty God for enabling me to finish this course, it has not been easy for me and I could not believe that at one time I would reach this far. I am grateful to my supervisors Mr. Elvis Khisa and Dr Isaac Nabeta Nkote for all the guidance and encouragement they offered me up to the time I completed this dissertation. I would like to acknowledge the employees of Stanbic bank that took part in this study for sparing time and patience in answering the questionnaires. My sincere thanks go to my friends whom we held discussions together as a group. Lastly my special thanks go to my line manager, Mr. Patrick Mwesige at the Electricity Regulatory Authority who continuously encouraged me to finish my masters degree.

May the Almighty bless you so much.

LIST OF ACRONYMS

AMA	:	Advanced Measurement Approaches
CVI	:	Content Validity Index
EVT	:	Extreme Value Theory
IT	:	Information Technology
Kris	:	Key Risk Indicators
MORE	:	Multinational Operational Risk Exchange
ORM	:	Operational Risk Management
SBUL	:	Stanbic Bank Uganda Ltd
SPE	:	Severity, Probability, and Exposure
SPSS	:	Statistical Package for Social Sciences
STAAR	:	Spread out, Transfer, Avoid, Accept, and Reduce
UGX	:	Uganda Shillings

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ABSTRACT

The study was motivated by the persistent fraud in Stanbic bank which could be a pointer of Stanbic bank being faced with operational risk challenges which have affected its performance. The purpose of the study was to examine the relationship between operational risk management, organizational environment and organizational performance in Stanbic Bank Uganda Limited. The study undertook a cross sectional survey design. Data was collected using self administered questionnaires and analyzed using the Statistical Package for Social Sciences (SPSS V.16) to generate descriptive and inferential statistics.

The findings indicated that there were strong positive and significant relationships between operational risk management, organizational environment and organizational performance. The findings from regression analysis revealed that operational risk management and organizational environment were significant predictors of organizational performance.

In conclusion, in order for the bank to realize effectiveness and efficiency in its performance, management should work towards putting in place a favourable organizational environment which does not promote operational risk as this will have a great impact on organizational performance. From the findings, the model explains only 42.4% in variance of the organizational performance, therefore, a study be carried out comprising of other factors which were not part of the model to account for the percentage which was not explained by the model. In addition, to study the true nature and quality of operational risk management, organizational environment and organizational performance, a longitudinal study could be designed.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Risk is the possibility of an adverse event occurring with the potential to adversely affect the interests of the organization (Bagumire, 2006). This issue of risk has gained prominence world wide and this problem has been captured at global level and at the commercial banks level. For international settlement, mechanisms have been developed to deal with this problem through Basel II. According to Basel II (2004), operational risk is the risk resulting from the inadequate or failed internal processes, people and systems or from external events. The impact of operational risk on an organization is portrayed in the form of direct financial loss, earning volatility, financial distress, and non financial effects on the future earnings capacity of the organization. Basel II want to address this issue through requiring banks to adopt mechanisms or standards. This is promoted by an enabling organizational environment to support banks to grow. The failure to manage risk has affected banks leading to some failing and others experiencing financial distress.

At the international level, notable institutions affected included the collapse of Barings Bank, financial losses of US\$ 8bn in Societe Generale and US\$38 billion in UBS the Swiss banking giant which are examples of the impact of operational risk in banking. All this is attributed to poor management of risk (Sabastian 2008). The cause of financial loss in Societe Generale was attributed to one individual who traded in unauthorized derivatives, (Sabastian, 2008 and Jean, 2008. According to Figueira, Nellis and Parker (2009), banks in

Spain and Portugal had improved their performance over time due to technological change which is consistent with the study on performance evaluation and risk analysis of online banking service by Wu and Wu (2010) whose findings indicated that most giant banks were performing well. This was attributed to employees as the key variable that contributed most of the banks revenue.

In the case of Uganda, the financial sector has undergone several reforms geared among other things toward improvement of operational risk management. The reforms in the sector brought about the formation of the operational risk management framework which is now operational in all commercial banks including Stanbic Bank Uganda Ltd (SBUL). Stanbic bank Uganda Limited is a subsidiary of Standard Bank group Limited, and public limited liability company with over 73 branches and 157 ATM's spread across the country. According to the bank's performance of 2009, Stanbic Bank made a pretax income of UGX. 122.5 billion and in 2010 recorded UGX. 87.6 billion showing a decrease of 34.9 billion in pretax income of the bank. In regard to profit after tax, the bank realized UGX 72.1 billion showing a decreased of 24.4% from UGX. 95.3 billion.

Similarly, the existence of the governance structure framework has not cubed the rampant unethical behaviour by staff at the bank. Stanbic bank faces operational, financial and strategic risks. According to the Stanbic Banks Annual report (2009), "the banks approach to risk management is based on a well established governance process and relies on both individual responsibility and collective oversight supported by comprehensive reporting" the bank also has risk management structures in form of risk management committee of the board of directors, credit risk committee, audit committee and internal audit assurance

whose primary objective is the provision of assurance to the audit committee on the quality of controls (Stanbic Bank Annual Report, 2010).

1.2 Statement of the Problem

Despite the existence of robust operational risk governance standards at Stanbic bank, the bank has been experiencing continuous bank fraud, outright robberies, system failures and deliberate refusal to follow procedures with the staff of the bank playing a central role in most of the reported cases (Bank of Uganda On-Site Examination Report, 2009). The report revealed that for the financial year 2008/09, operation risk had increased from UGX. 0.8 billion to UGX.4.8 billion indicating a 600% increase in operational risk within a period of one year. Similarly, the statistics on SBUL, for the period 2007 to 2009, revealed that the number of frauds involving staff hit the highest level with reports of staff aiding businessmen and spouses to defraud the bank. The changing environment in regard to changing peoples' perceptions and attitudes has made operational risk a moving target. According to the Bank of Uganda On-Site Examination Report, (2009) revealed that for the period 2007/08 to 2008/09 operational risk increased from 0.8 billion to 4.8 billion which affected the performance of the SBUL. This could be due to failure on the part of management to eliminate or control risk in the operations of the bank with major emphasis on people. If this is not addressed, the problem of operational risk at SBUL could worsen.

1.3 Purpose of the Study

The study sought to establish the relationship between operational risk management, organizational environment and organizational performance in Stanbic Bank Uganda Limited.

1.4 Objectives of the Study

- i) To establish the relationship between operational risk and organizational environment in Stanbic Bank.
- ii) To establish the relationship between Organizational environment and organizational performance.
- iii) To establish the relationship between Operational risk and organizational performance in Stanbic Bank.

1.5 Research Questions

- i) What is the relationship between operational risk and organizational environment in Stanbic Bank?
- ii) What is the relationship between Organizational environment and organizational performance?
- iii) What is the relationship between operational risk management and organizational performance in Stanbic Bank?

1.6 Scope of the Study

- **Subject Scope**

The study focused on the relationship between operational risk management, organizational environment and organizational performance in Stanbic Bank Uganda Limited.

- **Geographical Scope**

The study was carried out at SBUL whose headquarters and selected branches located in Kampala District.

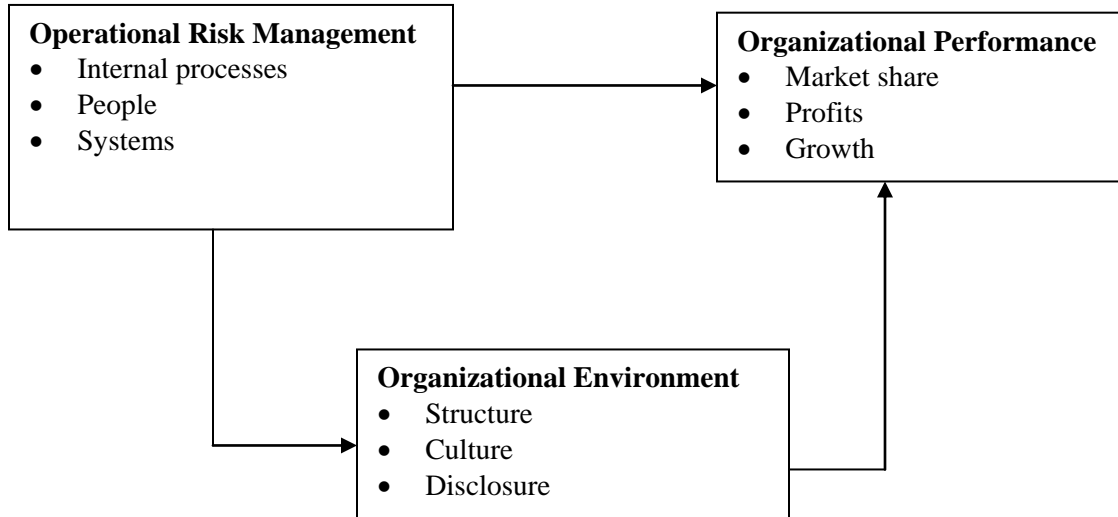
1.7 Significance of the Study

The study will be significant to the following groups of people as discussed below:-

- For the academicians, the study may add knowledge and debate on operations risk management, which may be used for further research in this area.
- The findings and recommendations may be used for improving operational risk management policies and operations for the financial institutions.
- Since the study aims at identifying the adequacy of the current people risk management framework at Stanbic Bank, this information will be useful to commercial banks because it will be used to address these causes thus improving the performance of commercial banks in the economy.
- The study findings will help future researchers as it will be used as reference to their future researches in the field of risk management related issues.
- The study is a partial academic requirement of the university leading to the award of master's degree. Therefore the researcher will use this study to fulfill the University academic requirements.

1.8 Conceptual Frame Work

Figure 1.1: Conceptual Frame Work



Source: Adopted from: (to Abdou, (2009); Kanwar (2009); Saunders and Cornett (2006); (Cope et al, 2009) Brunner et al (2008)).

The conceptual framework was developed after review of related literature on the study variables. The model shown in the figure above examines the relationship between operational risk management, organizational environment and organizational performance. This model draws mainly from Abdou's (2009) three dimensions of operational risk management, that is, internal processes, people and systems. Other researchers like Kanwar (2009); Saunders and Cornett (2006) have emphasized the above factors as being most crucial in operational risk management. Operational risk management plays a big role in enhancing organizational performance. According to Kanwar (2009), operational risk management is positively related to organizational performance. Saunders and Cornett

(2006) recognize operational risk management and organizational environment as independent contributors to organizational performance.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter focused on review of literature according to the objectives identified in the previous chapter. The three main objectives were to establish the relationship between operational risk and organization performance; to establish the relationship between operational risk and organizational environment; to establish the relationship between organizational environment and organization performance in Stanbic Bank.

2.2 Operational Risk Management

Changes in markets, techniques, technologies, and products have altered the landscape of operations and fueled the explosive development of operational risk management. The regulators of financial and public companies are demanding a far greater level of disclosure and awareness by directors about the risks they manage and the effectiveness of the controls they have in place to reduce or mitigate these risks. According to Goodhart, (2001), an operational risk is, as the name suggests, a risk arising from execution of a company's business functions. It is a very broad concept which focuses on the risks arising from the people, systems and processes through which a company operates. It also includes other categories such as fraud risks, legal risks, physical or environmental risks.

Operational risk is perhaps the most significant risk organizations face. Many financial institutions have spent tens of millions of dollars trying to develop a robust framework for

measuring and managing operational risk (Hoffman, 2002). Yet, in spite of this huge investment, for many firms developing a viable operational risk management (ORM) program remains an elusive goal. A lot has to do with the way organizations have approached this problem and the underlying assumptions they have made. Many financial firms believe that operational risk is not a material risk (Hussain, 2000). This can be seen in the low capital charge allocated to this risk relative to other risks. Many view operational risk as just back-office operations risk, and executives generally believe that ORM is fundamentally about managing control weaknesses in the processes at a tactical level (Marshall, 2001). These views have largely shaped the funding and staffing decisions, which have in turn affected resource allocation and methodology development.

The recent wave of losses in the financial services industry has forced many senior executives to rethink their overall approach to risk management. Many now realize that operational risk is a much more important risk than it was originally thought to be. As a result, some are considering a new approach to managing this type of risk (Al-Tamimi, 2008). Indeed, the effectiveness of operational risk management has been impeded by a common failure to truly embed operational risk into the overall management of risk and control. Group risk functions must demonstrate to business-unit staff the full potential of using operational risk processes, developed under the group framework to manage the actual risks in the business.

According to Abdou, (2009) management of risks is important to banking because banking operations affect and is affected by the economic and social environmental risks that they face. Banks face a number of risks like credit risk, liquidity risk, foreign exchange risk,

market risk, and interest rate risk among others (Abul, 2009). Kanwar (2009) identified that volatility of global markets, technological advancements, innovative new financial products and changing regulatory environments as the factors that have it increasingly important to identify, measure, monitor and manage a financial institutions' risks. According to Abul (2009) the most important types of risk that the Islamic banks in Brunei Darussalam are facing are foreign-exchange risk, followed by credit risk and then operating risk. Saunders and Cornett (2006), argues that financial institutions are in the risk management business as they bear and manage risks on behalf of their customers through the pooling of risks and the sale of their services as risk specialists.

Operational risk is manifested in the form of “mistakes, incompetence, criminal acts, qualitative and quantitative unavailability of employees, failure of technical systems, and dangers resulting from external factors such as external fraud, violence, physical threats or natural disasters as well as legal risk” (Sabastian, 2008). However data and measurement of operational risk are key challenges to its management. A survey conducted on twenty two Indian banks indicates insufficient internal data, difficulties in collection of external loss data and modelling complexities as significant impediments in the implementation of operational risk management framework in banks in India (Usha, 2009).

Advanced measurement approaches based on internal loss data, external loss data, scenario analysis and bank specific business environmental and internal control factors (Usha, 2009) and requires to measure the banks total annual operational risk exposures at the 99.9th percentile of the loss distribution(Cope et al, 2009). This measurement standard set by Advanced Measurement Approach is extremely high (Cope et al, 2009) Brunner et al

(2008) observed that after the subsequent run for Advanced Measurement Approach compliance, many banking institutions are now facing an increasing difficulty task, namely, how to get operational risk management and measurement work effectively. Having used the method for a maximum of ten years, banks have very little information to use in applying the Advanced Measurement Approach which requires data generated over 1000 years to meet the above standard (Cope et al, 2009).

2.2.1 Operational Risk Management Process (ORM)

The ORM process commences with the mission/task definition step. To accomplish this step start with the review of the current and planned operations, describing the mission at hand. Next define what is required to accomplish the tasks and the conditions under which to conduct them (Fatemi & Fooladi, 2006). To assist with this step, construct a list or chart depicting the operation's major phases or steps in the job process, normally in time sequence then break down the operation into "bite-size" chunks.

Using the list or chart formulated in Step 1, list the hazards associated with each phase of the operation or step in the job process. Potential failures, i.e., things that could go wrong, encompass equipment or operational problems both internal and external to the unit. Looking at each element of the "PEACE" model (Planning, Event complexity, Asset selection, Communications, and Environmental conditions) will ensure effective hazard identification in equipment, environment and personnel (Cope et al, 2009). This step starts with consideration of the risk and determination of the individual risk levels for each hazard identified. Then this is followed by the assessment of the risk by evaluating specific

elements or factors, that, when combined, define risk (Carol, 2004). Two models that assess risk for these hazards are the Severity, Probability, and Exposure (SPE) and the Green, Amber, and Red (GAR) models. They differ in how they look at the hazards identified in Step 2 of the ORM process.

Starting with the highest risk hazards assessed in Step 3, identify as many risk control options or safeguards as possible for all hazards exceeding an acceptable degree of risk. Then determine each option's impact on mission and unit goals and select the perceived best alternative or combination of alternatives (Cope et al, 2009). Mission priority and time criticality often drive option choice. Risk control options include Spread out, Transfer, Avoid, Accept, and Reduce (STAAR).

Spread Out: Risk commonly is spread out by increasing either the exposure distance or the time between exposures.

Transfer: Transferring risk does not change probability or severity but rather shifts possible losses or costs to another entity.

Avoid: Avoiding risk altogether requires canceling or delaying the job, mission, or operation, but this option is rarely exercised due to mission importance. However, it may be possible to avoid specific risks, avoid risks associated with a night operation by planning the operation for daytime (Carol, 2004). Accept: Accept risk when the benefits clearly outweigh the costs, but only as much as necessary to accomplish the mission or task.

Reduce: Risk can be reduced. The overall goal of risk management is to plan missions or design systems that do not contain hazards (Fatemi & Fooladi, 2006). However, the nature of most complex operations and systems makes it impossible or impractical to design them

completely hazard-free. As we analyze hazards, we will identify those requiring resolution (Cope et al, 2009). To be effective, risk management strategies must address risk's components: severity, probability, and exposure. Using protective devices, engineering controls, and personal protective equipment usually helps control severity(Carol, 2004). Training, situational awareness, attitude change, rest, and stress reduction usually help control probability. Reducing the number of people involved or the number of events, cycles, or evolutions usually helps control exposure.

Analyze the operation's degree of risk with the proposed controls in place. Determine whether the operation's benefits now exceed the degree of risk the operation presents. Be sure to consider the cumulative risk of all identified hazards and the decision's long-term consequences (Cope et al, 2009). This step also serves as a reality check to verify that the objective is still valid. If the risk's costs outweigh the benefits, re-examine the control options to learn whether any new or modified controls are available. (Carol, 2004) If not, inform the next level in the chain of command that the mission's risk, based on the evaluation, exceeds the benefits and should be modified (Fatemi & Fooladi, 2006). If the mission's benefits outweigh the risks, with controls in place determine if the current level in the chain of command can implement all the controls. If not, find assistance from the next level in the chain of command. When notified of a situation whose risk outweighs benefit, the next level in the chain of command should assist with implementing required controls, modify or cancel the mission, or accept the identified risks.

The equation $\text{Risk} = \text{Severity} \times \text{Probability} \times \text{Exposure}$ defines what is called the expected value of the loss. However, individuals can value the same loss differently because the loss

may affect their overall satisfaction (their needs, issues, and concerns) differently. It is easy to overlook the issue of perceived value in typical risk management theories, but it may determine the kinds of actions decision-makers take in weighing risk vs. gain (Carol, 2004). Personnel should be aware the acceptability of risk can vary from person to person because the perceived risk, affected by different values placed on the expected loss, also varies (Cope et al, 2009). Therefore, while taking this "reality check" step in the risk management process, it is wise to consider a loss's perceived as well as expected value to avoid potential controversy when making risk decisions.

Once the risk control decision is made, assets must be made available to implement the specific controls. Part of implementing control measures is informing the personnel in the system of the risk management process results and subsequent decisions. If personnel disagree, the decision-makers should explain the decision rationally. Carefully documenting the decision and all steps in the process, usually done only for deliberate or strategic ORM applications, facilitates communications and clarifies the rational process behind risk management decisions.

Monitor the situation to ensure the controls are effective and remain in place. Identify changes requiring further risk management and act on them (Fatemi & Fooladi, 2006). Take action when necessary to correct ineffective risk controls and reinitiate the risk management steps in response to new hazards (Carol, 2004). It is important to remember risk management is a continuous process. Failure to respond to changes in the situation can become a link in a chain of errors that lead to a mishap.

2.2.2 Operational Risk Management Principles

There are four principles that govern all actions associated with operational risk management which include; accept no unnecessary risk, make risk decisions at the appropriate level, accept risk when benefits outweigh the costs and integrate ORM into planning at all levels (Carol, 2004). Unnecessary risk is that which carries no commensurate return in terms of benefits or opportunities. The most logical choices for accomplishing an operation are those that meet all requirements with the minimum acceptable risk (Alvarez, 2006). The corollary to this axiom is “accept necessary risk,” required to successfully complete the operation or task. Anyone can make a risk decision. However, the appropriate decision-maker is the person who can allocate the resources to reduce or eliminate the risk and implement controls (Schmidt, 2006).

The decision-maker must be authorized to accept levels of risk typical of the planned operation (Arman, Bin & Hassan, 2009). All identified benefits should be compared against all identified costs. Even high-risk endeavors may be undertaken when there is clear knowledge that the sum of the benefits exceeds the sum of the costs. Balancing costs and benefits is a subjective process, and ultimately the balance may have to be arbitrarily determined by the appropriate decision-maker (BCBS, 2006). Risks are more easily assessed and managed in the planning stages of an operation.

2.2.3 Levels of Risk Management

The risk management process exists on three levels, while it may be desirable to apply risk management in depth to every mission or task, time and resources may not always be

available (Global Risk Regulator, 2006). One objective of risk management training is to develop sufficient proficiency in applying the process so that risk management becomes an automatic part of the decision-making methodology on and off duty. Leaders must employ the risk management process to make sound, timely decisions. The three levels of risk management discussed below include emphasis on time critical, deliberate risk management and being strategic.

The first level of risk management is emphasis on time critical which is an on the run mental or verbal review of the situation using the basic risk management process without necessarily recording the information. This time critical process of risk management is employed by personnel to consider risk while making decisions in a time-compressed situation (Fatemi & Fooladi, 2006). This level of risk management is used during the execution phase of training or operations as well as in planning and execution during crisis responses. It is also the most easily applied level of risk management in off-duty situations (Hubner, Laylock & Peemoller, 2003). The second level is deliberate risk management. Deliberate risk management is the application of the complete process. It primarily uses experience and brainstorming to identify risks, hazards and develops controls and is therefore most effective when done in a group (Grais & Kulathunga, 2007). The third level is being strategic. This is the process with more thorough hazard identification and risk assessment involving research of available data, use of diagram and analysis tools, formal testing, or long term tracking of the risks associated with the system or operation (normally with assistance from technical experts). It is used to study the hazards and their associated risks in a complex operation or system, or one in which the hazards are not well understood

(Greuning & Iqbal, 2007).

2.2.4 Measurement of Operational Risk

Operational risk measurement and management drew the attention of senior managers after the collapse of several organisations and a number of derivatives disasters. According to the Basel Committee on Banking Supervision (2006), three methods for calculating operational risk capital charges in a continuum of increasing sophistication and risk sensitivity include the Basic Indicator Approach, the Standardized Approach and Advanced Measurement Approaches (AMA) and the Actuarial Approach. Therefore, banks and other financial institutions are encouraged to move along the spectrum of available approaches as they develop more sophisticated operational risk measurement systems and practices.

The Basic Indicator Approach (BIA) allows the banks to hold capital for operational risk equal to the average over the previous three years of a fixed percentage (α) of positive annual gross income. Negative and zero gross income are excluded from both the numerator and denominator when calculating the capital. Gross income in its simplest form is defined as net interest income plus net non-interest income (Basel Committee on Banking Supervision, 2006). This is the simplest of all the methods to maintain the operational risk capital. The method is based on a simple premise that the higher the gross income, the larger the operational risk, which might not always be true. Most of the supervisors in different countries have decided to go for this approach because of its simplicity in calculation and ease in adapting to Basel II rule (Global Risk Regulator, 2006).

In the standardized approach, the capital charge for each business line is calculated by multiplying gross income by a factor (beta) assigned to that business line. The total capital charge is calculated as the three year average of the sum of the capital charges across each of the business lines in each year. In the business lines the highest beta factor (18%) is with corporate finance, trading & sales and payment & settlement, while the lowest (12%) are with retail banking, retail brokerage and asset management. Therefore, banks with different exposures on different business lines shall have different capital charge that seems quite sensible based on the industry experience of losses because of operational risk from various business lines (Mestchian, 2003). There is a growing dissatisfaction as far as the Basic Indicator approach and the Standardized approach are used to calculate the regulatory capital for operational risk. These approaches are top down methods and based on the proxy figures of industry wide sample data on operational losses and also are not risk sensitive. This is why the Advanced Measurement Approaches (AMA) was developed.

The AMA is the most scientific method of the measurement of operational risk in terms of continuum sophistication and risk sensitivity wherein the regulatory capital charge will equal the risk measure generated by the banks' internal risk measurement system using the quantitative and qualitative criteria for the AMA (Oprisk & compliance, 2006). The loss model approach is the most used by the internationally active banks in developed economies. The Actuarial loss model approach has become accepted by the industry as the generic AMA for the determination of operational risk regulatory capital for the new Basel II accord (Carol 2004). The Basel Committee on Banking Supervision (2006) clearly outlines the standards to qualify for use of the AMA. The standards are three types: General standards, Qualitative standards and the Quantitative standards. The General

standards require a bank to have an actively involved board of directors and senior management in the oversight of operational risk management framework, an operational risk management system and the sufficient resources in the use of the approach.

In the Actuarial approach to loss measurement, Key Risk Indicators (KRIs) play a very significant role. KRIs can be extremely useful in the measurement and management of operational risk. KRIs are measurable metrics or indicators that track exposure or losses. They are especially valuable for high frequency, low severity types of events and processes and mostly useful when the volume is high. But one should also understand that KRI is not a measure of risk, it is an indicator of riskiness (Oprisk& compliance 2006). Vanadana & Dev (2006) in their paper outline four characteristics of KRIs of Operational risk that are not only desirable but also critical: a KRI has to be a measurable quantitatively; a KRI has to be statistically robust predictor of the probability of the occurrence ,if not the severity ,of an operational risk event; KRIs for each major operational event category have to be limited in number, say twenty because of pragmatic and statistical reasons ;and it has to be possible for the Operational risk manager to affect the value of a KRI over time. Sobehart (2006) divides the KRIs into four different categories: coincident indicators (a proxy measure of a loss event in the absence of actual loss data); causal indicators (a fundamental variable describing the cause of risk); control effectiveness indicators (a performance metric of risk controls); and volume indicators (a proxy value for the business complexity that indicates the likelihood or severity of a risk event). KRIs can be used in constructing the model for the loss severity. External loss data is extremely important to understand the full picture of possible operational event at any given point in time. The external loss data is a public data or the pooled industry data but have their own share of problems.

2.3 Organizational Environment

An organization's environment is composed of institutions or forces outside the organization that potentially affect the organization's performance. These typically include suppliers, customers, competitors, government regulatory agencies, public pressure and the like. As a result of environmental uncertainty. Some organizations face relatively static environments few forces in their environment are changing. There are for example, no new competitors no new technological by current competitors or little activity by public pressure groups to influence the organization (Usha, 2009). Other organizations face very dynamic environments rapidly changing government regulations affecting their business, new competitors, difficulties in acquiring raw materials, continually changing product preferences by customers and so on. Static environments create significantly less uncertainty for managers than do dynamic ones. And because uncertainty is a threat to an organization's effectiveness, management will try to minimize it. One way to reduce environmental uncertainty is through adjustments in the organization's structure.

Recent research has helped clarify what is meant by environmental uncertainty. It's been found there are three key dimensions to any organization's environmental: capacity, volatility and complexity (Kanwar, 2009). The capacity of an environment refers to the degree to which it can support growth. Rich and growing environments generate excess resources, which can buffer the organization in times of relative scarcity. Abundant capacity, for example, leaves room for an organization to make mistakes, while scarce capacity does not. In 2004, firms operating in the multimedia software business had

relatively abundant environments, whereas those in the full service brokerage business faced relative scarcity.

The degree of instability in an environment is captured in the volatility dimension. When there is a high degree of unpredictable change, the environment is dynamic. This makes it difficult for management to predict accurately the probabilities associated with various decisions alternatives. At the other extreme is a stable environment. Finally, the environment needs to be assessed in terms of complexity that is, the degree of heterogeneity and concentration among environmental elements. Simple environments are homogeneous and concentrated. In contrast, environments characterized by heterogeneity and dispersion are called complex. This is essentially the current environment for firms competing in the Internet connection business. Every day there seems to be another new kind on the block with whom current Internet access providers have to deal.

Organizations that operate in environments characterized as scarce, dynamic and complex face the greatest degree of uncertainty. Since they have little room for error, high unpredictability, and a diverse set of elements in the environment to monitor constantly. Given this three dimensional definition of environment general conclusions can be offeed. There is evidence that relates the degree of environmental uncertainty to different structural arrangements (Kanwar, 2009). Specifically, the more scarce, dynamic and complex the environment, the more organic a structure should be. The more abundant stable and simple the environment, the more the mechanistic structure will be preferred. Special organizational arrangements need to be made for fostering and utilizing entrepreneurship at times (Usha, 2009).

Environment consists of forces that directly affect the organizations ability to achieve its goals, objectives or performance. Banks operate in the external environment (Political, Economic, Social, Legal and Technological) and the internal environment. Management attitude towards internal controls in the bank are important in the successful control of operational risk. Given the experience, skills and competencies coupled with well defined organization structures, systems and board approved policies for operational risk, the researcher wonders how fraud, lack of demarcation of responsibilities and inadequate oversight of dealers activities could happen in Barings bank and what would happen to the infant banks in Uganda if operational risk of the same magnitude occurs (Usha, 2009).

2.4 Organizational Performance

Most organizations view their performance in terms of "effectiveness" in achieving their mission, purpose or goals. Most NGOs, for example, would tend to link the larger notion of organizational performance to the results of their particular programs to improve the lives of a target group (e.g. the poor) (Harmanzi, 2002). At the same time, a majority of organizations also see their performance in terms of their "efficiency" in deploying resources. This relates to the optimal use of resources to obtain the results desired. Finally, in order for an organization to remain viable over time, it must be both "financially viable" and "relevant" to its stakeholders and their changing needs (Kanwar, 2009). Performance can be measured using various variables like profitability, ratio analysis and net assets among others. Internally, performance is driven by the organization's motivation to perform, which refers to the organizational culture, history, mission, values and incentive systems. These factors affect the quality of work, the nature of how the organization competes, and the degree of involvement of internal stakeholders in decision-making

processes.

Performance is driven, in part, by organizational capacity, which we now understand as existing in seven basic areas: strategic leadership, human resources, financial resources, infrastructure, programming and process management, and inter-institutional linkages (Grody, et al 2009). Each of these seven capacity areas may be described in sub-components, as for example in the organization's strategic leadership capacity which is understood as its structure, governance, leadership, strategic plans and niche management. Human resources, financial resources and infrastructure are seen as resources as well as the management of these resources (Harmanzi, 2002). Organizations also have capacities that result from the relations, partnerships and alliances they have established with other organizations referred to as inter-institutional linkages.

2.5 Relational Literature

2.5.1 Operational Risk and Organizational Environment

Gentle (2008) found out that Current market dynamics reinforce the fact that there are few greater issues for financial institutions than governance and control systems. According to Tumusime (2010) speech at the Banking Industry Stakeholders' Roundtable Forum, the banking environment has changed presenting major opportunities and complex risks due to rapid innovations and internationalization of financial flows. Tumusime noted increasing level of fraud risk in the Ugandan banking industry. Kanwar (2009) argues that Besides establishing a tolerance level for operational risk, the Board of Directors needs to ensure that the senior management has put in place adequate systems, procedures and controls for all significant areas of operations. According to Grody (2008) regulators call for a

consistent and comprehensive capture and assessment of data elements needed to identify, measure, monitor and control banks operational risk exposure. According to Usha (2009) most banks in India had some kind of monitoring of operational risk and relied on traditional methods of reporting. However, historical losses are no pointer to future losses because of change of policy upon occurrence of a serious loss. Operational risk contains losses that follow from acts undertaken (neglected) in carrying out business activities and majority of operational risk are due to transaction processing errors, (Harmanzi, 2002) human error, absence of proper procedure, failure to follow existing procedure or inadequacies within the procedure, (Grody, et el 2009). According Grody et el (2008) line managers need to quantitatively report on high transaction counts, non reconciled positions, failure to deliver securities, overtime hours, absenteeism, systems down time, number of unauthorized accesses, number of password changes per employee and number of internal non client accounts opened.

2.5.2 Organizational Environment and Organizational Performance

According to Mugume (2009) macro economic environment determine banks spreads by enhancing the likelihood of default of debtors. While Egesa 2009, concluded that the financial sector reforms and regulatory framework had influenced the financial sector positively. The Basel II Accord, emphasizes capital adequacy, risk management techniques, internal controls and external audits, (Risk net 2007, Abul, 2010). The banks in Pakistani having different risk management departments however, lag behind in the use of financial mathematics, financial engineering and information technology to measure and monitor operational risk.

2.5.3 Operational Risk and Organizational Performance

The general financial theory believes that the higher the risk, the higher the returns (Performance). Rudra et al, 2008 found out that Returns on the banks' stocks appear to be sensitive to risk management capability of banks. While Kyereboah (2007) found that highly leveraged microfinance institutions perform better by reaching out to more clientele, enjoy scale economies, and therefore are better able to deal with moral hazard and adverse selection, enhancing their ability to deal with risk. However, higher risk threatens the long term survival of the bank, (Kanwar, 2009). Equilibrium between risk and return must be maintained through Recognition of both the potential value of opportunity and the potential impact of adverse effects, (Kanwar, 2009). As an approach to risk management, the Capital Asset Pricing Model, suggests elimination of unsystematic risk through diversification and investors rewards should be based on systematic risk. Heggstad, (1975) found out that non-banking activities are less risky and thus can be used to diversify the risk inherent in the commercial banking firm. Such diversification could engulf real estate, fund management, insurance, and broking activities, (Panayiotis, 2008). The researcher is of the opinion that since operational risk cannot be eliminated completely through diversification, it can be categorized as systematic risk and has to managed effectively.

2.6 Conclusion

Operational risk is a fact in banking and how much historical data can be used in designing systems, measures and policies to address it, is a question of debate. Organization environment both internal and external can make it either easy or difficult for operational risk to flourish. Whereas as assuming high risk demands higher performance, the occurrence of operational risk can destroy banks like in the case of Greenland and

cooperative banks in Uganda.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides the description of how the study was conducted. It brings out the research design, study population, sampling design and size, data collection instruments, data analysis and interpretation tools and limitations of the study.

3.2 Research Design

The study took a cross-sectional and descriptive survey design. The study adopted a correlation research design to establish the relationships between operational risk management, organizational environment and organizational performance.

3.3 Study Population

The population of the study was 60 staff comprising of 11 senior managers, 13 operations officers, 8 IT officers, 9 HR consultants, and 14 risk officers of Stanbic Bank involved in the risk management processes at the bank.

3.4 Sample Size

A sample of 51 respondents was determined scientifically using the table for determining sample size by Krejcie and Morgan's (1970). Simple random sampling technique was used to select the senior managers, operations officers and IT officers whereas, for the risk officers purposive sampling was used.

Table 3.1: Sample Size

Category of Respondents	Population	Sample Size	Sampling Technique
Senior managers	11	10	Purposive sampling
Operations officers	13	10	Purposive sampling
IT officers	8	8	Purposive sampling
HR consultants	9	9	Purposive sampling
Risk officers	19	14	Simple random sampling
Total	60	51	

3.5 Data Sources

- **Primary data**

Primary data was obtained through the use of self-administered questionnaires and interview guides to respondents following systematic and established academic procedures, as suggested by (Nunnally and Bernstein, 1994). The questionnaires were used for the collection of data from users while the interview guides for collection of data from staff.

- **Secondary data**

Secondary data was obtained through the already existing firms' literature and any other literature from council reports and journals.

3.6 Data Collection Instruments

Self administered questionnaire were used to collect data from respondents. The questionnaire was anchored on 5 point Likert scale ranging from "5" strongly agree to "1" strongly disagree. The interview method was used to ensure the high rates of response, as well as allowing for clarification of possible ambiguities related to questions asked.

3.7 Validity and Reliability

Validity of the instrument was obtained by talking to experts both academicians and practitioners in the field of risk management. These were required to comment on the relevance of the questions/items in the instrument using the Content Validity Index (CVI). The reliability of the questionnaires was improved through pre-testing of pilot samples. This enabled the amendment of some questions. Furthermore, reliability of the scales was carried out with the application of the Cronbach Coefficient Alpha for the computations so as to check for the internal consistency of the scales. The Cronbach Coefficient Alpha on internal consistency test was used with the following results.

Table 3.2: Reliability

Variable	Anchor	Cronbach Alpha Value
Operational Risk Management	5 Point	0.7154
Organizational environment	5 Point	0.6589
Organizational performance	5 Point	0.7326

Source: Primary data

The table 3.2 above displays the reliability indices/coefficients for all constructs used in the study. All alpha reliabilities (α) for all scales were above 0.5, ranging from 0.6589 to 0.7326 therefore meeting acceptance standards for research (Nunnally, 1978).

3.8 Measurement of Study Variables

Scales from previous studies carried out by other authors were adopted for the study.

- Organisational performance was measured according to scales adopted from Chen and Reinikka, (1999). The scales were anchored on 5 Liket scale ranging from strongly

disagree (1) to strongly agree (5).

- Operational risk management was measured according to its dimensions of people, systems, procedures and processes adopted from Hoffman (2002). The scales were anchored on 5 Likert scale ranging from strongly disagree (1) to strongly agree (5).
- Organisational environment was measured according to scales adopted from Usha (2009). The scales were anchored on a 5-point Likert scale ranging from (1) strongly disagree to (5) strongly agree.

3.9 Data Processing and Analysis

Data from the field was compiled, sorted, edited and coded to have the required quality, accuracy and completeness. Then entered into the computer using the Statistical Package for Social Sciences (SPSS v. 16.0) for analysis. The data was analyzed according to the research questions. Cross tabulations were used to describe sample characteristics, Pearson Correlation coefficient was used to establish the relationship between the study variables. The Regression analysis was used to establish the combined effect of study variables on the dependent variable.

3.10 Limitations

- i) Respondents withholding information due to fear of being victimized but however, the researcher assured them that the information would be kept confidential.
- ii) Unwillingness of respondents to fill questionnaires. The researcher ensured consistency in contacting the respondents and made sure reminders are sent to them to fill the questionnaires.

- iii) Respondents having a view of not obtaining any direct benefit from the research results. However the researcher assured them that they would benefit in the long run when the pertinent issues are raised to management and acted upon.

CHAPTER FOUR

PRESENTATION AND INTERPRETATION OF FINDINGS

4.1 Introduction

This chapter comprises of a presentation of results and their interpretation. The presentation in this chapter shows the results as tested according to the objectives of the study. During data collection out of the 51 questionnaires which were sent out to the field, 47 useable questionnaires were returned giving a response rate of 92.2%. The chapter begins with the demographic characteristics of the respondents such as designation, gender, duration of organisation, educational level and department which were all presented using frequency tabulations, later in the chapter, more descriptive were used to present the results of the respondents had, together with a combination of Pearson Correlation and Regression Analysis.

4.2 Sample Characteristics

To present sample characteristics, frequency tabulations were used to indicate variations of respondents based on designation, gender, duration of organisation, educational level and department. The sample characteristics were presented basing on the responses from staff.

4.2.1 Respondent Category by Gender

Frequency tabulation was used by the researcher to present the respondent category and gender distribution categories of the respondents. Table 4.1 below presents the results:

Table 4.1 Respondent Category and Gender Distribution

		Frequency	Valid Percent	Cumulative Percent
Valid	Male	26	55.3	55.3
	Female	21	44.7	100
	Total	47	100.0	

Source: Primary data

The results indicated that the majority of the respondents were male (55.3%) and 44.7% were female. This implies that the majority of the staff involved in the risk areas in the bank were male.

4.2.2 Level of Education

The frequency distributions were further used to examine the highest academic qualifications of the respondents and the results are presented in table 4.2 below.

Table 4.2: Respondent Category by Level of Education

		Frequency	Percentage	Cumulative Percent
	Degree	32	68.1	68.1
	Professional qualification	8	17.0	85.1
	Masters	7	14.9	100.0
Total		47	100	

Source: Primary data

According to the results in table 4.2, 68.1% of the respondents were degree holders, 17% were professional qualification holders whereas, 14.8% held masters degrees. From the findings, the majority of the responses were acquired from the degree holders and masters holders. This implies that data was collected from the staff who possessed the required information for the study.

4.2.3 Duration with Organisation

Frequency tabulation was used by the researcher to present the period of employment distribution of the respondents. Table 4.3 below presented the results:

Table 4.3: Duration with Organization

		Frequency	Valid Percent	Cumulative Percent
Valid	2 - 5 yrs	10	21.3	22
	Over 5 yrs	37	78.7	100
	Total	47	100.0	

Source: Primary data

From the results in table 4.3 above, it was observed that 21.3% of the respondents had worked with the bank for some 2 - 5 years, whereas, the majority (78.7%) had worked with the bank for over 5 years. This could imply that the majority of the staff at the bank working in the risky department had served the bank for atleast more than 5 years which is confirmation that they possessed the required experience.

4.2.4 Age Group

Frequency tabulation was used by the researcher to present the age distribution of the respondents. Table 4.4 below presented the results:

Table 4.4: Age Respondent Distribution

		Frequency	Valid Percent	Cumulative Percent
	21 - 39 yrs	26	55.3	55.3
	Over 40 yrs	21	44.7	100
	Total	47	100	

Source: Primary data

According to the results in table 4.4 above, there were no staff members who were below the age of 20 years. The majority of the respondents fell in the age bracket of 21-39 with a percentage of 55.3%. While those over 40 years of age constituted 44.7%. the results imply that the composition of the respondents was made up of staff who were mature enough and possessed the required experience to manage risky operations at the bank.

4.3 Factor Analysis Results

Factor analysis was used to examine the composition of the study variables, and identify the most critical elements of these variables. Factor analysis was applied to reduce the number of variables to a smaller number of factors where, this simplified data structure by revealing a smaller number of underlying factors. On the other hand factor analysis was used to detect structure in the relationships between variables, that is, to classify variables. This investigated the underlying correlational patterns shared by the variables in order to test the theoretical model.

4.3.1 Operational Risk Management

The factor analysis results for the Organisational Environment were as indicated in the table below

Table 4.6: Factor Analysis for Operational Risk Management

Operational Risk Management	<i>Systems</i>	<i>Internal Processes</i>	<i>People</i>
The risk department identifies and assesses core risks and opportunities for which the firm has a comparative advantage	.857		
The department also identifies, assesses and prioritizes risks of the organization in line with the risk appetite and strategic objectives	.777		
The department has set up processes to identify and assess emerging risks and opportunities	.872		
The department tries to integrate risk with SWOT analysis and other strategic initiatives	.780		
The department has enough technical and infrastructure support in terms of staff	.909		
My organization has an effective risk management system in place		.821	
Having proper risk management processes in place improves delivery of services		.738	
Proper risk management processes greatly reduce the potential for financial loss in the organization		.555	
Forward looking financial and non financial statements about desired risk profile are translated into risk limits for all core risks		.760	
The department has all the resources to ensure system safety		.747	
The staff of the bank are always ethical in the execution of their duties			.801
Our exposure to people risk is increasing			.824
Management is always involved in risk mitigation			.882
There is always information flow amongst staff			.890
We regularly refer to our past experiences			.959
Staff are usually sensitized on risk management			.891
Staff always adhere to the approved procedures			.778
The staff of the bank are always committed and honest			.795
We always integrate risk management into planning at all levels			.761
Eigen Values	5.771	3.357	5.687
Variance %	45.714	13.574	17.563
Cumulative%	45.714	59.288	76.851

Source: Primary data

The results highlighted systems, internal processes and people as key elements of the Operational Risk Management variable. These three components account for 76.851% of the variance in Operational Risk Management.

This component accounts for 45.714% of the variance in Operations Risk Management. With this component, results show that it is very essential for the risk department to identify and assesses core risks and opportunities for which the firm has a comparative advantage (.857). Just as vital on the systems element is the capacity of the department to identify, and track risks of the organisation relative to the risk appetite and strategic objectives of the bank (.777). When it comes to systems, it is essential for the bank to set up processes to identify and assess emerging risks and opportunities (.872). In addition, the capacity of the bank to use SWOT analysis and other strategic initiatives to help the organization strategically position it self in the market to attain its long term goals and objectives (.780) is a very crucial element. The respondents also indicated that with systems, its very imperative for the bank to attain enough technical and infrastructure support in terms of staff (.909).

This component which accounts for 13.574% of the variance in operational Risk Management, was represented by 5 items in the factor analysis results. Among these, was use of an effective risk management system by the bank (.821), having proper risk management processes in place improves delivery of services (.738). The bank has the challenge of managing the risk processes if it is to significantly reduce the potential for financial loss in the organization (.555). In addition, the bank should uphold forward looking financial and non financial statements about desired risk profile and should

translate into risk limits for all core risks (.760).

This component which accounts for 17.563% of the variance in operational risk management, was represented by 9 items in the factor analysis results. Among these, was to regularly refer to past experiences (.959), sensitization of staff on risk management (.891), information flow amongst staff (.890), management involvement in risk mitigation (.882), increasing exposure to people risk (.824) and staff of the bank should always ethical in the execution of their duties (.801).

4.3.2 Organizational Environment

The factor analysis results for the organisational environment were as indicated in the table below

Table 4.7: Factor Analysis for Organisational Environment

Factor Analysis: Organisational Environment	<i>Structures</i>	<i>Cultures</i>	<i>Disclosure</i>
The organization has a fully fledged CRO in place	.937		
The CRO has a clear mandate of how to go about with his daily work	.887		
The organization has a clear ORM policy with well defined roles and guidelines	.626		
The organization has a complementary risk, audit and compliance function.	.635		
We have established continuous and forward looking processes to identify risks and opportunities	.688		
We also perform an overall risk and opportunities evaluation of all risk areas	.726		
We have established incentives and performance measures based on value generated by opportunities and losses anticipated	.814		
IT support for the ORM system is adequate	.686		
We do internal and external communication to inform stakeholders about our risk appetite and risk opportunities		.905	
We have designed day to day decision dash boards with minimum and maximum limits		.931	
We apply traditional risk treatment approaches like control, hedging and insurance in the context of risk-return trade offs		.814	
We incorporate capital and risk management as part of the risk response including contingent capital like insurance		.825	
Independent views are sought by management on the way forward in ORM			.657
We use a feedback loop to validate and back test the ORM processes before full implementation			.647
Eigen Values	7.491	2.239	1.496
Variance %	49.938	14.923	9.976
Cumulative%	49.938	64.861	74.837

Source: Primary data

Structures, a component which constituted 49.938% indicated that there is need to ensure that the bank has a fully pledged CRO (.937) which should have a clear mandate of how to go about with its daily work (.887). Other relevant issues on this component noted were;

Possession of clear operational risk management policy with well defined roles and guidelines (.626), adequate information technology support for the operational risk management system (.686) which should be coupled with the risk, audit and compliance functions (.635). The researcher further noted that Stanbic bank needs established continuous and forward looking processes which identify the risk (.688) and evaluate risks and opportunities (.726). Another key and vital feature of this component is the establishment of the incentives and performance measures based on value generated by opportunities and losses anticipated (.814).

The study identified four issues under components of culture and these pertained to communication, decision dash boards, traditional risk treatment approaches and risk approaches. These components account for 14.923% of the overall Organisational Environment variable. It is essential when considering the cultures of the Organisational environment to reinforce internal and external communication to bank stakeholders about the risk appetite and risk opportunities (.905). Stanbic bank should as well oversee day to day decision dash boards with minimum and maximum limits (.931). In addition Stanbic bank's capacity to use traditional risk treatment approaches (.814) and incorporates capital as part of the risk response (.825) will prove very valuable on the element of the risk cultures. With the disclosure component, the bank's capacity to seek independent views on the way forward (.657) and use a feedback loop to validate and back test the operational risk management processes before full implementation (.647) are very critical elements.

4.3.3 Organisational Performance

The factor analysis results for the organisational performance were as indicated in the table below

Table 4.8: Factor Analysis for Organisational performance

	<i>Growth</i>	<i>Market Share</i>	<i>Profitability</i>
The capacity and performance of the current system supports the corporation's strategic objectives	.863		
The ORM system supports our departmental goals	.827		
The system clearly supports our requirements (administrative controls-transaction controls, limit controls, accounting controls)	.841		
The system clearly supports our facilitates due diligence assessments	.787		
System provides us with timely, reliable, accurate, meaningful and easy to use reports for proper decision making	.870		
System has tight IT controls assuring the security of the system (entering incorrect data, changing data, deleting data, destroying data, crashing systems, holding data hostage)	.864		
Our market share has improved over time as a result of our ORM system		.931	
Our market has grown over time as a result of ORM systems improvement		.939	
Our profitability has improved over time as a result of our ORM system			.901
Our profitability has grown over time as a result of ORM systems improvement			.914
The ORM system has enabled us reduce the number of fraud cases			.895
Eigen Values	6.019	1.365	1.365
Variance %	44.882	18.164	19.164
Cumulative%	44.882	63.046	82.21

Source: Primary data

Results revealed that the growth, market share and profitability account for 82.21% of the variance in the overall performance of the bank. Critical elements of the growth component pertained to; having a capacity and performance of the current system which supports the corporation's strategic objectives (.863) and possession of an ORM System which supports the bank departmental goals (.827). The system should clearly support bank requirements (.841) and facilitates due diligence assessments (.787). Serious elements of the market share component included that market share had improved over time as a result of ORM systems (.931) and the bank's market had grown over time as a result of ORM systems improvement (.939). Critical elements of the profitability component pertained to; improved over time as a result of ORM system (.901), growth in profitability over time as a result of ORM systems improvement (.914) and ORM systems had enabled the bank reduce the number of fraud cases (.895).

4.4 Inferential Statistics

In this section, the results that address the research objectives are presented and Pearson's Correlation Test was used to answer the research questions of the study. Correlation is a technique for investigating the relationship between two quantitative, continuous variables. Pearson's correlation coefficient (r) is a measure of the strength of the association between the two variables. The Pearson correlation coefficient is a measure of the strength of the linear relationship between two variables. Where the relationship between the variables is not linear, then the correlation coefficient does not adequately represent the strength of the relationship between the variables. Pearson's r can range from -1 to 1. An r of -1 indicates a perfect negative linear relationship between variables, an r of 0 indicates no linear relationship between variables, and an r of 1 indicates a perfect positive relationship

between variables. To investigate the relationship among the constructs a Zero-order correlation table was generated. The Pearson correlation coefficient (r) was employed to establish the relationship between the variables (operational risk management, organizational environment and organizational performance).

Table 4.9: Relationships between the Variables/Zero Order Matrix

	1	2	3	4	5	6	7	8	9
<i>Systems-1</i>	1.000								
<i>Internal Processes-2</i>	.679**	1.000							
<i>People-3</i>	.453**	.564**	1.000						
Operational Risk Management-4	.696**	.537**	.515**	1.000					
<i>Structures-5</i>	.715**	.646**	.400**	.490**	1.000				
<i>Cultures-6</i>	.600**	.581**	.307*	.369*	.317	1.000			
<i>Disclosure-7</i>	.407*	.326	.385**	.509**	.145	.517**	1.000		
Organisational Environment-8	.585**	.529**	.598**	.484**	.270	.897**	.849**	1.000	
Organisational Performance-9	.598**	.505**	.508**	.537**	.153	.554**	.538**	.621**	1.000
** Correlation is significant at the 0.01 level (2-tailed).									
* Correlation is significant at the 0.05 level (2-tailed).									

Source: Primary data

To establish the relationship between the study variables (operational risk management and organizational environment) and organizational performance, Pearson Correlation coefficients were generated with use of SPSS V17. The correlations revealed the level of strength and significance of the relationships between the study variables and the independent variable.

4.4.1 Operational Risk Management and Organizational Environment

Results indicated that the operational risk management and organisational environment are significantly and positively related ($r = .484^{**}$, $p < .01$). These results showed that systems and internal processes which are components of operational risk management, are positively related ($\text{sig.} < .01$). These results show that if operational risk management is well addressed in terms of training staff, enforcing controls and eliminating bureaucracy, the bank will have a better working environment to offer to its employees.

4.4.2 Organizational Environment and Organizational Performance

Apart from Structures, the other components of organizational environment which are culture and disclosure showed significantly positive relationships with performance. The parameters for these relationships were as follows; culture ($r = .554^{**}$, $p < .01$), disclosure ($r = .538^{**}$, $p < .01$). Organizational environment and organizational performance are positively significant and in a practical sense if there is a culture of learning among employees, this will boost performance in terms of profitability, growth and market share.

4.4.3 Operational Risk Management and Organizational Performance

Operational risk management and organizational performance were further noted to be positively related ($r = .537^{**}$, $p < .01$). The more the bank can manage risk through internal controls and use of competent and well trained staff, who follow the ethical standards of the bank, the more effective and efficient the bank will become.

4.5 Regression Model

Regression analysis includes any techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more

independent variables. More specifically, regression analysis helps understand how the typical value of the dependent variable changes when any one of the independent variables is varied, while the other independent variables are held fixed. Most commonly, regression analysis estimates the conditional expectation of the dependent variable given the independent variables. Regression analysis is also used to understand which among the independent variables are related to the dependent variable, and to explore the forms of these relationships. Therefore, regression analysis was carried out to examine the extent to which study variables (operational risk management and organizational environment) predicted organizational performance of Stanbic bank.

Table 4.10: Prediction Model

Model	Unstandardised Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.595	.485		1.226	.229
Operational Risk Management	.373	.182	.309	2.047	.049
Organisational Environment	.761	.244	.471	3.123	.004
Dependent Variable: Organisational Performance					
R Square	.459				
Adjusted R Square	.424				
Sig.	.000				

Source: Primary data

According to table 4.10, Operational Risk Management and Organisational Environment were observed to have capacity to account for 42.4% of the variance in organisational Performance (Adjusted R Square = .424). The regression model was significant and thus reliable for making conclusions and recommendations (Sig. <.05). The most significant predictors of organizational performance was organizational environment (Beta= .471, t=

3.123, Sig. = 0.004) followed by operational risk management (Beta= .309, t= 2.047, Sig. = 0.049). The findings revealed that operational risk management and organisational environment are both significant predictors of organisational performance (sig. <.05). The regression model was valid (sig. <.01).

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the discussion, conclusions, and recommendations arising out of the research findings in chapter four and suggests areas for further study.

5.2 Discussion

5.2.1 Operational Risk Management and Organizational Environment

The findings revealed a significant relationship between operational risk management and organizational environment. This was confirmed by the findings on the selected dimensions of ORM, thus, systems, internal processes and people. According to Frowen, Pringle & Weller (2000), the two components of people risk (human error and human fraud) are very difficult to control, because their causes are often hard to identify (fully). No matter how good an organisation's procedures and systems are, if an employee becomes unreliable, deliberately or not, an organisation will find it difficult to prevent fraud and/or mistakes. Indeed, a significant number of financial losses and physical accidents experienced by banks can be attributed to the fact that people acted inappropriately through sheer incompetence, lack of commitment or deliberate fraud (Diebold, Schuermann & Stroughair, 2000). While in a number of cases certain improvements in internal control procedures might have (partly) prevented or delayed the errors, in most cases the "writing was on the wall". No matter how good procedures are, there will always be certain employees who do not have the required technical and behavioural competencies to

perform their tasks and others who will deliberately manipulate and exploit the weaknesses in their organisation's internal control environment to pursue their own personal goals. Likewise, failure to manage operational risk and inexistence of a team-based organisation structure, undermined the quality of services offered.

5.2.2 Organizational Environment and Organisational Performance

The findings revealed a significant relationship between structures, disclosure and cultures the components of organisational environment and organizational performance. This is supported by Mugume (2009) who asserts that macro economic environment determines bank spreads by enhancing the likelihood of default of debtors. Therefore, organisations should ensure that their risk culture aligns their overall mindset and expectations with the individual competencies, attitudes and motivation of their employees (Goodhart, 2001). To create such a risk culture, organisations must continually emphasise that their risk management, their risk strategies and policies align with the day-to-day reality in the workplace. While Egesa (2009), concluded that the financial sector reforms and regulatory framework had influenced the financial sector positively. The Basel II Accord, emphasizes capital adequacy, risk management techniques, internal controls and external audits. (Risk net 2007, Abul, 2010).

5.2.3 Operational Risk Management and Organizational Performance

A significant relationship was observed for the relationship between operational risk management and organizational performance and were further noted to be positively related. A financial institution's ability to recover from system hits, a catastrophe, equipment failures, viruses, theft and accounting-mix-ups is dependent on a whole range of

factors, from strict adherence to process and operational procedures, the robustness of its hardware and operating system, to the extensiveness of its back-up operations. And it goes without saying that the effectiveness of the entire enterprise information package is relative to its alignment with the business' communication network. Ensuring a high level of data quality requires a sophisticated solution that includes process and workflow management, as well as organisational design and technology - the actual hardware, middleware and software controlling a system (Marshall, 2001). Part of that control also entails the creation of a history of losses, which is necessary to bring financial institutions into compliance with the Basel regulations.

Despite the financial sector's efforts to control people risk, institutions still have much work to do and some of the unique challenges that operational risk management brings. One of the challenges faced during operational risk management is rising costs of compliance. Goodhart (2001) asserts that effective management of people risk requires diverse information from a variety of sources-including, for example, risk reports, risk and control profiles, people risk incidents, key risk indicators, risk heat maps, and rules and definitions for regulatory capital and economic capital reporting. Likewise, a well-structured people risk framework requires development of business-line databases to capture loss events attributable to various categories of people risk. However, if bank's top leaders perceive operational risk management solely as a regulatory mandate, rather than as an important means of enhancing competitiveness and performance, they may tend to be less supportive of such efforts (Marshall, 2001). Management and the board must understand the importance of people risk, demonstrate their support for its management, and designate an

appropriate managing entity and framework - one that is part of the bank's overall corporate governance framework.

5.3 Conclusions

The conclusion of the study was made in accordance with the study objectives.

According to the findings, it was revealed that there was a significant positive relationship between ORM and organizational environment. This is confirmation that abuse of the bank processes, systems and procedures by staff depended so much on the robustness of the existing structures at the bank, the organizational culture and level of disclosure at the bank.

The findings revealed a significant and positive relationship between organizational environment and organizational performance was observed. This is confirmation that the more the bank structures were robust, promotion of ethical organizational culture and restricted disclosure of bank information, this would promote growth of the bank in terms of profits and market share.

According to the findings correlation results showed significant and positive relationships between ORM and organizational performance. This is evidence that the less risky the bank's operations are in regard to the systems, procedures, processes and people, this would enhance the market share, profits and growth of the bank.

The findings further revealed that ORM was the most significant predictor of organizational performance. The independent variables combined together accounted for only 42.4% variance in organizational performance in Stanbic bank. Other factors affecting

organizational performance in Stanbic bank accounted for recoded 57.6%.

5.4 Recommendations

In light of the research findings, the following recommendations are made:

- i) From the findings organizational environment was found to be a significant predictor of organizational performance. Therefore, the management of the bank should put in place the required structures, promote a good organizational cultures and put controls on the bank disclosures during bank operations as this will enhance the growth in terms of profitability and market share of the bank.
- ii) According to the findings, the management of the bank needs to put a lot of emphasis on the significant relationships between the study variables and organizational performance as a means of improving the performance of the bank.
- iii) In situations were the bank cannot mitigate the risk, the bank should protect itself through insurance cover. This will protect the bank from risky ventures against loss.
- iv) Training of staff in risk management should be part and persil by the management of the bank. This could be in terms of training in new technologies such as IT systems, processes and procedures. This will help staff acquire advanced knowledge in IT system operations which will help them develop skills to identify occurrences of risk during the performance of their duties.
- v) For management to control risk at the bank, there should be effective monitoring and evaluation of bank transactions whether manual and or electronic. This calls for system forensic experts who are task to double check other staff operations on systems, procedures and processes.

- vi) The management of the bank should institute stringent measures on system access and navigation to limit system abuse by staff and colleagues. This could be through putting data protocols with authorized access to information on the system.
- vii) There should be a lot of emphasis on effective communication on the part of management as this will have a positive effect on the image, reputation and personality of the bank. Therefore, a comprehensive public relations department is paramount to provide feedback and response to public information.

5.5 Areas for further study

The results of the study point to a number of opportunities for further research into ORM, organizational environment and organizational performance.

- i) This study concentrated on ORM, organizational environment and organizational performance. Future research should attempt to collect data from other sectors to ascertain the findings.
- ii) ORM and organizational environment predicted 42.4% of the variance in organisational performance. Further studies should establish what other factors explain the variance in organisational performance at Stanbic bank.
- iii) To study the true nature and quality of ORM, organizational environment and organizational performance, a longitudinal study is more appropriate.

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APPENDIX I

**ELECTRICITY REGULATORY AUTHORITY STAFF QUESTIONNAIRE
STAFF QUESTIONNAIRE**

Dear respondent,

My name is Nabweteme Sewanyana Grace a student of Makerere University pursuing a Masters of Science degree in Accounting and Finance. I am carrying out research entitled “Operations Risk management and organizational performance the case of Stanbic Bank.

Please spare some time and answer the questions that follow. Your response will be kept strictly confidential and will only be accessed by the research team. The information provided will only be used for academic purposes in this study.

Thank you very much for your time and cooperation.

Yours Cordially,

.....
Nabweteme Sewanyana Grace
Researcher

SECTION A:

Personal Data

1. Title/designation.....

2. Gender

Male Female

3. Highest level of education attained

Certificate level

Diploma

Degree

Other (Please specify).....

4. Department.....

5. Duration with organization/department Age of respondent

Under 2 years	<input type="text"/>	25 to 30	<input type="text"/>
2 to 5 years	<input type="text"/>	35 to 40	<input type="text"/>
Over 5 years	<input type="text"/>	Over 40	<input type="text"/>

SECTION B:

Operational Risk Management (Process, People, systems, External events)

1. Strongly agree 2. Agree 3. Not sure 4. Disagree 5. Strongly Disagree

		1	2	3	4	5
	<i>Systems</i>					
1	The risk department identifies and assesses core risks and opportunities for which the firm has a comparative advantage					
2	The department also identifies, assesses and prioritizes risks of the organization in line with the risk appetite and strategic objectives					
3	The department has set up processes to identify and assess emerging risks and opportunities					
4	The department tries to integrate risk with SWOT analysis and other strategic initiatives					
5	The department has enough technical and infrastructure support in terms of staff					
	<i>Internal Processes</i>					
6	My organization has an effective risk management system in place					
7	Having proper risk management processes in place improves delivery of services					
8	Proper risk management processes greatly reduce the potential for financial loss in the organization					
9	Forward looking financial and non financial statements about desired risk profile are translated into risk limits for all core risks					
10	The department has all the resources to ensure system safety					
	<i>People</i>					
11	The staff of the bank are always ethical in the execution of their duties					
12	Our exposure to people risk is increasing					
13	Management is always involved in risk mitigation					
14	There is always information flow amongst staff					
15	We regularly refer to our past experiences					
16	Staff are usually sensitized on risk management					
17	Staff always adhere to the approved procedures					
18	The staff of the bank are always committed and honest					
19	We always integrate risk management into planning at all levels					

Section C: Organizational Environment (culture, infrastructure and communication)

1. Strongly agree 2. Agree 3. Not Sure 4. Disagree 5. Strongly Disagree

	<i>Structures</i>	1	2	3	4	5
1	The organization has a fully fledged CRO in place					
2	The CRO has a clear mandate of how to go about with his daily work					
3	The organization has a clear ORM policy with well defined roles and guidelines					
4	The organization has a complementary risk, audit and compliance function.					
5	We have established continuous and forward looking processes to identify risks and opportunities					
6	We also perform an overall risk and opportunities evaluation of all risk areas					
7	We have established incentives and performance measures based on value generated by opportunities and losses anticipated					
8	IT support for the ORM system is adequate					
	<i>Cultures</i>					
9	We do internal and external communication to inform stakeholders about our risk appetite and risk opportunities					
10	We have designed day to day decision dash boards with minimum and maximum limits					
11	We apply traditional risk treatment approaches like control, hedging and insurance in the context of risk-return trade offs					
12	We incorporate capital and risk management as part of the risk response including contingent capital like insurance					
	<i>Disclosure</i>					
13	Independent views are sought by management on the way forward in ORM					
14	We use a feedback loop to validate and back test the ORM processes before full implementation					

Section D: Organizational Performance (Market Share, Profits, Growth)

	<i>Growth</i>	1	2	3	4	5
1	The capacity and performance of the current system supports the corporation's strategic objectives					
2	The ORM system supports our departmental goals					
3	The system clearly supports our requirements (administrative controls-transaction controls, limit controls, accounting controls)					
4	The system clearly supports our facilitates due diligence assessments					
5	System provides us with timely, reliable, accurate, meaningful and easy to use reports					

	for proper decision making					
6	System has tight IT controls assuring the security of the system (entering incorrect data, changing data, deleting data, destroying data, crashing systems, holding data hostage)					
	Market Share					
7	Our market share has improved over time as a result of our ORM system					
8	Our market has grown over time as a result of ORM systems improvement					
	Profitability					
9	Our profitability has improved over time as a result of our ORM system					
10	Our profitability has grown over time as a result of ORM systems improvement					
11	The ORM system has enabled us reduce the number of fraud cases					

1. In your opinion what are the challenges are you facing in terms of implementing proper ORM systems at Stanbic?

.....
.....
.....

2. How can the above challenges be addressed?

.....
.....
.....
.....

3. Suggest ways of improving the current ORM system in your department.

.....
.....
.....
.....

Thank you very much for your time and support

INTERVIEW GUIDE
(To be filled by Top Management)

1. What department do you belong?
2. How many professional employees in risk?
3. Do you have an ORM in place?
4. Does your ORM system capture the operational risk events in the day to day management and practice?
5. Does your organization quantify and keep a record of the operational risk events that have occurred?
6. Does your organization categorize the operational risk events? Mention categories.
7. What methods do you use to quantify operational risk (in respect of size and likelihood)
8. Do you have a fully operational risk department in the organization? What is its structure like?
9. How often is the system backed up?
10. Do you make frequent updates to the system?
11. Who manages the data destruction procedure?
12. How does your organization handle risk in terms of mitigation