

## **THE OPTION OF RISK MANAGEMENT PRACTICE IN PERFORMANCE OF INFORMATION TECHNOLOGY (IT) PROJECTS IN THE KENYAN BANKING SECTOR.**

**Fredrick Okongó Ouma & Dr. Paul Sang**

Kenyatta University. School of Business.

### **ABSTRACT**

Project Risk Management includes the processes of conducting risk management planning, identification, analysis, response planning, response implementation, and monitoring risk on a project. The objectives of project risk management is to increase the probability and/or impact of positive risks and to decrease the probability and/or impact of negative risks, in order to optimize the chances of project success.(PMBOK 6th Edition). Risk Management is an integral component in the performance of any project including information system projects. The Kenyan Banking, and Financial Services sector in general is highly regulated and therefore inherently conservative. It's an industry where a commitment to undertaking Information System Projects that are innovative in nature is detrimental and poses significant risk to the Institution in the event of failure. The Central Bank of Kenya (CBK) has issued a Guidance Note on Cyber security to address Technology and cyber risks and the associated reputational risk arising .The Standish Group report 2019: 83.9% of IT projects partially or completely fail. According to Standish only 16.2% of projects were deemed successful by being completed on time and budget, with all the promised functionality. A majority of projects, or 52.7%, were over cost, over time, and/or lacking promised functionality. That leaves 31.1% to be classified as failed, which means they were abandoned or cancelled. This paper seeks to determine the practice of risk management in Information System projects in a Kenyan Banking sector context and its contribution to performance of the Projects. The argument in this paper will aid project managers and different stakeholders in the Banking sector in managing Risks that are related to the IT projects and increase project success rate by implementing adequate risk control models. With increased competitive nature of banking in Kenya and the Digitization of Banking processes, Banks cannot avoid undertaking IT related projects.

## **Introduction**

The Kenyan Banking sector is changing. The transformation in its ways of operation is evident with the digitization of most functions. In this age of Computers and Mobile phones, a customer need not to go to the Banking halls for a transaction to be effected. Instead the Bank has come to the homes or offices where they work. In actual fact, a client walks with his bank in the mobile application in his hands.

In this race to attract new customers and retain the once that exists, Banks are spending huge sums of Money in their IT platforms. Like any other project, IT projects are an Investment that need to be evaluated carefully to ensure Banks have a positive return on the Investment. According to the CBK 2017 annual banking supervision report most banks applied for licences to According to CBK, the year 2017 saw a number of Kenyan Banks engage CBK on licensing financial technology use cases. e.g. Block chain Technology, Chat bots, Video Teller Machines (VTMs, Psychometric credit scores) .These emerging disruptive technologies projects bring with them, various forms of risks. Hence the CBK issued the Guidance Note on Cyber security to address Technology and cyber risks and the associated reputational risk arising.

In undertaking these IT projects, Banks attract several Risks .In practical aspects many IT projects fail in several aspects: This includes delays in implementation, where projects take too long to be completed .Some projects face total collapse where the required functionality is not met or partly met and hence not able to bring in the leverage that it was set up for. The Standish Group report 2019: 83.9% of IT projects partially or completely fail. According to Standish only 16.2% of projects were deemed successful by being completed on time and budget, with all the promised functionality. A majority of projects, or 52.7%, were over cost, over time, and/or lacking promised functionality. That leaves 31.1% to be classified as failed, which means they were abandoned or cancelled.Randell et al. described that “70% of software projects fail due to poor requirements with an associated rework spend up to \$45 billion annually”.

The question project Teams in commercial Banks need to ask. Can risk management practice minimise the failure rates in IT project implementation? How does an effective and mature risk management practice in an Organization as a whole and a project in specific help attain the desired goals of an IT project? In comparison, are projects that

integrate Risk management practice different with the once that don't: the option of Risk management.

### **Risk Management**

According to the Project Management Book of Knowledge.(PMBOK 6th Edition),Project Risk Management includes the processes of conducting risk management planning, identification, analysis, response planning, response implementation, and monitoring risk on a project. The objectives of project risk management is to increase the probability and/or impact of positive risks and to decrease the probability and/or impact of negative risks, in order to optimize the chances of project success. Risk management practice hence is a contributor to positive performance in the Project and improves chances of success rates.

Therefore Risk Management is an integral component in the performance of any project including information system projects. The practice of project risk management can be traced to the standardization of project management as a profession, starting between the 1940s and 1950s (Kerzner, 2009; Shenhar&Dvir, 1996).The Kenyan Banking sector in general is highly regulated by the Central Bank of Kenya and the Capital Markets Authority and therefore any project undertaking that affects Customer financial data must be done right. In the event of a system failure, the Banks would face incredible financial and non-financial losses.

According to the 10<sup>th</sup> Global Project Management Survey of the Project Management Institute (2018) named *Success in Disruptive Times:Expanding the Value Delivery Landscape to Address the High Cost of Low Performance*. A question was posed on how often organizations use risk management practice .The results 27% always ,35% often ,25% sometimes ,11% really and 3% never. This indicates that the use of Risk management practice is varied across organizations globally. Although there is high importance of risk management to IT project performance, the adoption of these risk management methods in practice is inconsistent In addition, and there are a number of project managers that decided not to apply any risk management due to financial reasons. This as noted in:*The Rational Choice of Not Applying Project Risk Management in Information Technology Projects* (Elmar, K & Mark H 2009)

When a project Team decides not to incorporate the practice of Risk Management in the Project, would cost be a proper justification. I believe the costs of applying project risk management are compensated by mitigating the risks that adversely influence the project outcome. If Project Managers are able to quantify the Risks magnitude in financial terms, it will be easier to justify and convince project sponsors for an additional budget line on Risk management incorporation.

### **The Innovators:**

The IT projects are driven by the innovative nature of business operations today. Clients are looking for the best new experience in Banking that is easy, simple and reliable for their transactions. In this Drive, Banks have to be innovative and invest new products and applications. Innovation is trying a new thing, something that not everyone has done. Now this attracts known and unknown risks. It is a thin balancing act between high risk taking and higher returns or staying conservative with lower returns.

According to a PwC *2018 Risk in Review Study* report, There is need for Risk management to be embedded in innovation projects. Companies that have figured out the integration of performing risk management and innovation have higher confidence to manage new technologies such as drones, robotic process automation (RPA), or artificial intelligence. That group of higher-performing companies on combined innovation risk are referred to as adapters. Instead of performing risk management in a vacuum, leading companies embed risk management into the innovation process, such adapters have more confidence in their ability to project revenue growth than non-adapters. More companies (58%, compared with 19% of non-adapters) say risk management contributes significant value to their organisation.

The report in addition points out that: Adapters are far more likely than non-adapters to: Create new products or services outside core offerings, or enter a new industry (57% to 21%); Implement technologies to develop new products or target new customers (57% to 18%); and Implement technologies to materially improve existing products or customer experience (56% to 20%). This is an indicator that the practice of Risk management and integrating it in the IT project bring out more of the desired results than when Risk management is totally ignored or not part of the project assignment.

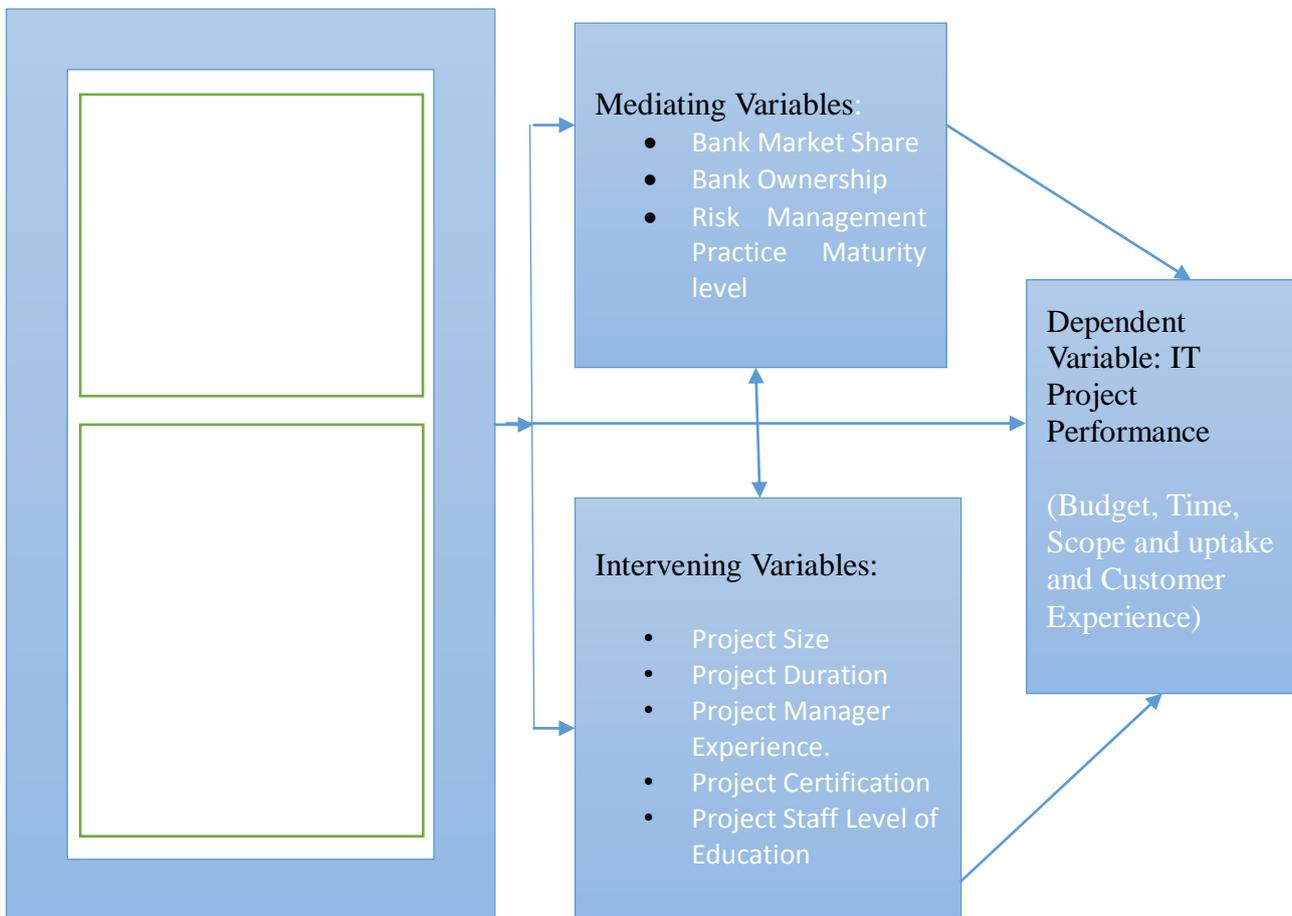
According to Steve Culp (2013) Risk management and Innovation are not adversaries. Innovation and risk management should be viewed as partners. When properly fused, the

two disciplines can help organizations pursue opportunities that a risk-averse culture might not realise. Risk management can help foster a company's innovation agenda by revealing blind spots and areas of underinvestment that threaten the upside of a company's future. Risk management in IT project is a boost and a plus and not another pump on the road.

### **The Risks to watch**

Information Technology projects face a number of Risks. Some are internally related to the specific Bank and others are externally driven: The figure below depicts in summary, but not conclusively the Risk that may relate to the project:

### **Risk Contributors**

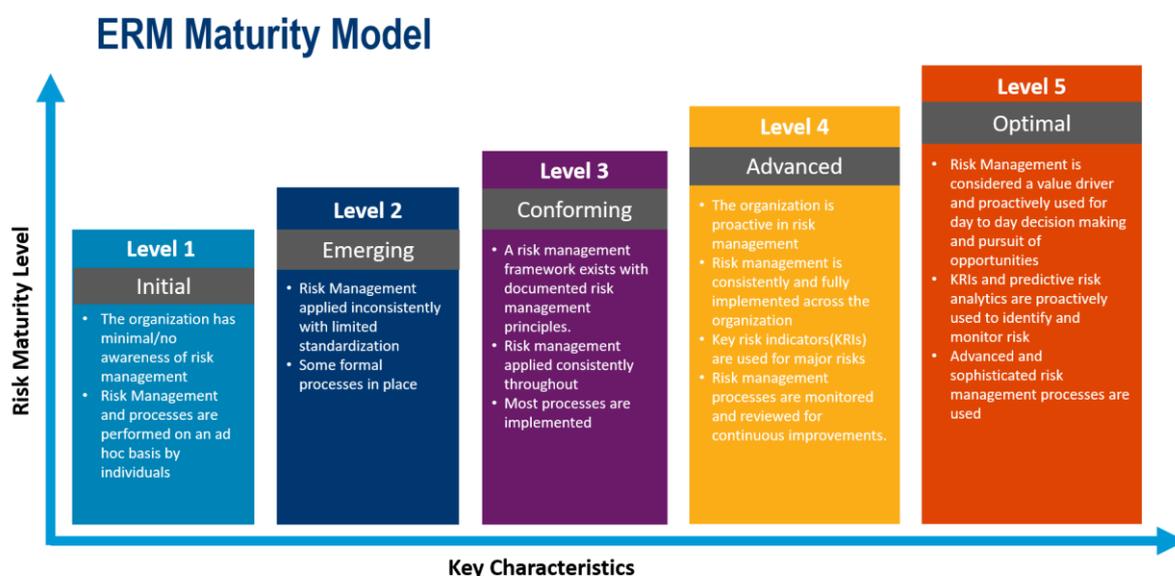


Source: Risk IT framework, EXCERPT (2009)

### **The Risk Management Maturity Level**

How best a Bank will handle risks its facing in the IT project depends in its Risk maturity level. Risk maturity is a benchmarking tool, which measures to what extent an organization

has implemented Enterprise Risk Management (ERM), in accordance with prevailing best practice. The levels are from the Basic (initial) to optimal risk management level. Banks that are at the optimal level handle Risks better and consider Risk as a Value Driver and embrace systemic risk management.



Source: Morgan Franklin Consulting 2019.

### **Risk Responses**

There are several ways of dealing with Risks that the Project is facing once the Risks have been identified, assessed, and prioritized, management should determine the appropriate response for all identified risks in the risk register. Responses include: Avoidance, where the Bank may decide not to undertake the Project if it is deemed to be highly risky. Risk Acceptance is also another method of dealing with Risks especially residual risks when all possible controls have been implemented. A project team can also decide to control the Risks. This is called Mitigation, by putting in place controls and processes that minimise the Risk. Risk can also be transferred to a third party like to an Insurance firm. The Project Team will need to decide on the most effective method of treating Identified Risks.

### **IT Project Performance:**

When an IT project is considered successful? The traditional triangle of assessing a successful project involved the Project being completed within budget, the required output achieved and on time. However with IT projects other factors come into play. The project

Team need to assess if the project has meet the proper performance and specification level. Another aspect is projects alignment to the regulators requirement and the laws that govern Banking sector like the Banking Act and Prudential guidelines and any relevant communications such as the Cyber security guidance note.

The project Team ought to ask, are all stakeholders happy? This brings up the aspect of Customer experience and uptake of the product by the Customers. This uptake is what generates revenue for the Bank hence a boost in Pay back on the initial capital investment. IT projects also are deemed successful if it had minimal scope changes and less negative disruption on business processes. A successful Project should also meet ethical, moral and safety standards e.g. how it handles personal data. Sufficient controls ought to be in place to assure confidentiality, Integrity of the data and availability of the system. The project also needs to deliver the expected business value and return on investment.

Early risk identification, analysis and control mechanisms is an aspect that can increase the chances of the Project success. The Risk Management process is a continuous venture through the life cycle of the project. This is so since risks change with every stage of the Project. Ongoing risk management is important so as to detect early warning signs in a project. Banks are also supposed to plan for the unexpected: Organisations and project managers are not in a position to anticipate or plan for the unexpected – but the unexpected cannot be avoided.

Andreas G& Iris S (2019) wrote a paper *managing the unexpected in megaprojects: riding the waves of resilience*. This paper argues that classic project management, while neglecting the fundamental distinction between risk, uncertainty and the unexpected, sticks to a planning-and-controlling approach. But the unexpected cannot be planned; however, organisations and managers can prepare for the unexpected. This requests a balance between structure and self-organisation in planning, communication, hierarchy and organisational culture. Understanding the contradictions inherent in managing mega projects allows for smart decision-making when riding the waves of resilience. This brings in the aspect of Organization resilience in the times of unforeseen negative impact such as catastrophic loss of a data centre or a major cyber-attack.

## **Conclusions and Recommendations**

Undertaking an IT project is not a simple task .It requires technical and interpersonal skills to be able to attain the required output and within the timelines as per the Banks information technology strategic objective. As the Banks continue to invest in Technology, there is a greater need to show returns and value that has been generated by this new technology. The Boards of Directors are more increasingly interested in the Investments in Technology versus the value it derives to the stakeholders and not just automating for the sake of it.

IT projects will face and attract different Risks during the project development stages. It is a fact that cannot be ignored, hence Banks will need to incorporate and integrate Risk management processes in the development of IT projects. Some of the key undertaking would be: Having a robust Risk management Framework approved by the Risk and Compliance Committee of the Board; Having a Risk management department that is adequately resourced; Being able to integrate the Enterprise Risk management frameworks to the IT Specific projects within the Bank. This can be done by having lead Risk officers attached to the Project and whose role is to score, rate, monitor and mitigate any Risks the Project is experiencing.

Banks in Kenya ought to integrate Risk management practices within the IT projects they are undertaking to improve in project success rates and experience value and positive returns in their investments. Mature Risk management model enables the project steering committee to have situational awareness in the project and this enables them to address issues promptly and objectively. In every undertaking in Business, Risk is a factor that is inherent. This research paper will be critical to the Banking sector in Kenya in their undertaking of Information System Projects in the aspect of Risk practice and management and be able to address early warning signs as noted in Philip, T&Schwabe, G. (2018) in the paper *Understanding early warning signs of failure in offshore-outsourced software projects at team level*.

Currently I am undertaking a study to identify Significant Risks affecting I T projects within the Kenyan Banking Sector. The study will be highlighting Risk magnitudes and Responses attributed to particular Risks and notable remedies on Risk responses reported. The study will also analyse the correlation of Risk Management and Project performance

in the Banking Sector in Kenya. The Study will benefit a number of stakeholders including Risk Professionals and Scholars, Project Managers, Board Members in the Banking Sector, and the regulator Central Bank of Kenya (CBK). I believe the Contribution of the study to this digital era will be evident.

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