A Risk Analysis of Prominent Risks Associated with Real Time Gross Settlement System of Fund Transfer in Zambia

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ABSTRACT

A payment system consists of the procedures and associated computer networks used by its participants to transfer money. Sometimes called the 'plumbing' of the financial system, smoothly functioning payment systems are essential to the operation of financial markets

In a real-time gross settlement (RTGS) system, payments settle immediately and with finality in central bank money, providing that the paying bank has sufficient liquidity to fund the outgoing payment. But the aggregate amount of liquidity needed to fund payment obligations is often much less than gross payment flows and this background presents a source of risk. Risk analysis is a concept that has attracted many researchers and practitioners in both business and project management fields. This is because both businesses and projects aim at avoiding and or minimising losses while maximising gains. This view was adopted when undertaking the current study whose aim was to ascertain the prominent risks associated with the Real Time Gross Settlement System (RTGS) operated by the Bank of Zambia.

Literature relevant to answer the research questions was reviewed. The research design used was descriptive and explorative in which semi structured questionnaires were used to collect data. Responses from users of the RTGS were coded and used to generate descriptive statistics which were in turn used as entry parameters prior to simulation.

The simulation outputs revealed that Settlement, Human and Replacement risks were the prominent risks associated with operating the RTGS in Zambia.

Introduction

In the recent years, the banking environment has witnessed a tremendous transformation as banks scramble for customers (Lundvall, 2010; Frank and Hesse, 2009). The rapid rate of change in the financial sector no doubt calls for an assessment of the efficacy of risk management systems of financial institutions on one hand and devising appropriate regulatory responses to the challenges that these changes may pose, on the other. Financial innovations are at the center of the debate on how to shape the future global financial system.

However, determining whether an innovation is subject largely to measurable risk or immeasurable uncertainty is not, in itself, an easy task (Fagerberg and Verspagen, 2009). In many industries,

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innovations are released into or directed towards a relatively unchanging environment, aside from the effects of competitive innovation itself. The recent financial innovations such as Real Time Gross Settlement, (RTGS) have widened opportunities for commercial banks while at the same time increasing the risk of exposure. Subramanian (2008) concluded with an affirmative need to evaluate mega projects, particularly, in infrastructure development and funding, where the future is uncertain, problems are complex and the risks are immense. Beyani and Kasonde (2005) noted that it is very important for institutions to have a futuristic view in formulating risk management policies. This will thus enable institutions be better prepared for new risk exposures.

Risk management (RM) is in use in almost all industries, from IT related business, automobile or pharmaceutical industry, the construction sector to the banking sector. Each industry has developed their own risk management standards, but the general ideas of the concept usually remain the same regardless of the sector. According to the Project Management Institute (PMI) (2004), project risk management is one of the nine most critical parts of project commissioning. This indicates a strong relationship between managing risks and project success. While risk management is described as the most difficult area within construction management (Winch, 2002; Potts 2008), its application is promoted in all projects in order to avoid negative consequences (Potts, 2008). Risk management uses the risk management process (RMP) to identify analyse and respond to risks (Cooper et al., 2005). In each of these steps, there are a number of methods and techniques which facilitate handling the risks.

The industry at issue, the banking industry, operates in a very uncertain environment where conditions can change due to the sensitivity of each operation (Sanvido et al., 1992), and yet the industry aims at becoming successful therefore risk management can facilitate this aim. However it should be underlined that risk management is not a tool which ensures success but rather a tool which helps to increase the probability of achieving success. Risk management is therefore a proactive rather than a reactive concept. Many previous studies (Klemetti, 2006; Lyons and Skitmore, 2004; Zou *et. al.,* 2006) have been conducted within the field of risk management but each presents a different approach to this study. This work focuses on the banking sector and particularly the newly introduced Real Time Gross Settlement system for funds transfer in Zambia.

The current study seeks to analyse the prominent risks associated with the Real Time Gross Settlement system of money transfer in Zambia. The system is based on real time money transfer whereby the recipient receives the money just after the transfer command no matter the location of the recipient. The system is information technology (IT) based and is therefore susceptible to risks. Common risks suffered by the system include credit risk, technology failure risk, liquidity risk and operation risk (Kremlyak and Kafol, 2014).

It is important therefore that risk analysis is conducted and mitigation measures highlighted in the risk register to guarantee business operations. The risk analysis that produces a risk register as an output is the methodology that will be mimicked in the current paper.

Risk analysis, or 'probabilistic simulation' based on the Monte-Carlo simulation technique is a methodology by which the uncertainty encompassing the main variables projected in a forecasting

model is processed in order to estimate the impact of risk on the projected results (Glenday, 1989). It is a technique by which a mathematical model is subjected to a number of simulation runs, usually with the aid of a computer. During this process, successive scenarios are built up using input values for the project's key uncertain variables which are selected at random from multi-value probability distributions (Pouliquen, 1970). The current research will adopt this analytical approach to analyse the prominent risks associated with the Real Time Gross Settlement system to produce a risk profile and risk register

The Real Time Gross Settlement System (RTGS)

The Real Time Gross Settlement Systems offer a rich set of banking-related services that provide value throughout the financial and real sectors of the economy. Bank and non-bank financial institutions, commercial and industrial firms, and even individuals benefit from use of RTGS services. The terms and conditions under which access to RTGS services is granted have an important bearing on how effectively and efficiently an RTGS system supports the financial and real sectors of the economy. Moreover, the terms of access affect the abilities of the providers and users of RTGS services to manage their payment system risks.

The Real Time Gross Settlement System (RTGS) is a system of fund transfer where transfer of money takes place from one bank to another on a real time and gross basis. Settlement in real time system means payment transaction is not subjected to any waiting period. The transaction is settled as soon as it is processed. The transaction is settled on one to one basis without netting with any other transaction. Once processed, payments are final and irrevocable and this makes the system liable to loss hence risky. The principal goals of the international central banking community in offering RTGS services are to increase safety and efficiency in systemically important payment systems, thereby serving the wider objectives of large-value payment systems across the financial markets and the real economy (Allsopp, et at., 2008).

The World Bank Group (2008) surveyed 142 central banks about their national payment systems. The survey included questions about national large-value and RTGS systems, and also about settlement arrangements for securities and foreign exchange that rely on RTGS systems for final settlement. The central bank respondents indicated that an RTGS is a feature of their national payment systems in 112 of the 142 cases. The central bank is the settlement authority for every RTGS system, and the RTGS system is operated by the central bank in 108 cases. Some countries share RTGS platforms and altogether the survey identified 98 distinct systems. The survey results suggest that central bank operational principles and practices vary greatly across these systems in the areas of access, liquidity and credit, and costing and pricing and this variation is another source of risk (Allsopp, *et al*., 2008).

The analysis of risk in this paper will focus on settlement accounts only and the risks will be analysed using a risk profile generated from the probability of occurrence and impact after occurrence outputting a risk register. This will be determined from the mean, variance, standard deviation, skew and kurtosis of both occurrence and impact. This is consistent with Allsopp, et al. (2008) who argued that both the

IMF review and the Bank of England response focus only on credit risk to the correspondent banks acting as direct access settlement participants on behalf of their respondent bank indirect access participants.

Study Objectives

The problem in this study is that risks associated with operating the Real Time Gross System in Zambia have not been analysed and documented and then prominent risks with very high likelihood of occurrence and severe impact have not been profiled. This leaves the client intending or using the RTGS to use it without scientifically proven chance of loss from the highly likely risk. This implies that customers make uninformed decisions when using the system because no risk register is available to take calculated risks when using the system.

Further, Allsopp *et. al.* (2008) argues that the RTGS is a single point of failure across the entire financial system, in that participants face liquidity impacts from all of their links, as well as settlement links to clearing houses and other elements of financial markets infrastructures, sometimes in multiple countries and currencies simultaneously. For instance, Rodger and Raymond (2015) revealed that on 20 October 2014, the Bank of England's (BoE) Real Time Gross Settlement (RTGS) System suûered a lengthy technical outage lasting almost ten hours. Whilst several ûnancial market infrastructures (FMIs) including CREST and various retail payment systems settle through RTGS, the one most aûected was the CHAPS system under which, unlike the other FMIs, individual payments are settled in RTGS before being executed hence no settlement was made in that period of time.

In as much as the system is important for easy and fast business transactions, the systems possess inherent and external risks with great potential for huge losses should the risks materialize. The World Bank survey of 2007, revealed risks such as credit and liquidity which are linked to the transmitters of the funds but did not analyse in detail the risks specific and internal to the system.

Study Scope

The study is aimed at underpinning the prominent risks associated with RTGS in the banking sector. It is built around project risk management with a bias to financial system innovation. Therefore, the newly adopted innovation is subjected to scrutiny related to its potential failures.

Literature review

Risk Analysis

Over the last decades, risk analysis and corporate risk management activities have become very important elements for both financial as well as non-financial corporations. Firms are exposed to different sources of risk, which can be divided into operational risks and financial risks.

In the field of safety and health, risk is linked with possible hazards and dangers, while in finance it is a technical matter of unpredictability in expected outcomes, both negative and positive. In other businesses and political settings, risk is closely associated with the spirit of enterprise and value creation (Power, 2007). Merna (2002) suggests: "we are at a unique point in the market where players are starting to recognize that risks need to be quantified and that information about these projects needs to be made available to all participants in the transaction."

A recent definition of risk by Hansel (1999), defined risk as chances of loss; chances of mishap while in the 1970s, Rowe (1977) defined risk as 'The potential for unwanted negative consequences of an event or activity' whilst many authors define risk as 'A measure of the probability and the severity of adverse effects'. Rescher (1983) explains that 'Risk is the chancing of a negative outcome. To measure risk we must accordingly measure both its defining components, and the chance of negativity'. The way in which these measurements must be combined is described by Gratt (1987) as 'estimation of risk is usually based on the expected result of the conditional probability of the event occurring times the consequences of the event given that it has occurred' Analysis and assessment of risks provides a systematic approach for evaluating the risks that stakeholders identify.

Risk analysis can be qualitative based on subjective assessment using experience or intuition. Quantitative analysis on the other hand is based on mathematical and statistical techniques that allow to model a respective risk situation. However, "quantitative techniques operate around some probability rule of the thumb (Marchewka, 2003)." The purpose of risk analysis is to determine the likelihood of occurrence of each identified risks and its impact on the project so as to plan for the appropriate response (Marchewka, 2003)." According to Passenheim (2009), "risk analysis covers a complete and continuous evaluation which should be qualitative as well as quantitative for all identified risks. Its goal is to detect possible interrelationships and enables the project manager to identify some order of importance or prioritization."

Each approach has its own strengths and weaknesses when dealing with risk and uncertainty but a combination of qualitative and quantitative methods provide valuable insight when performing risk analysis and assessment. However, Passenheim (2009) and Nicholas and Steyn (2008), observed that "in order to do a proper risk evaluation, the level to conduct the evaluation should be defined. For instance, there should be ranges say between (0 -1.0) to give the severity/likelihood a "size" which denotes a range from low, very low, and high to very high, where 0 is "not serious" and 1.0 is "catastrophic and needs attention. Both qualitative and quantitative ratings are based on judgment of managers and experts.

Empirical Literature

Edward *et. al.* (2015), in a study on variations in liquidity provision in real-time payment systems, found that on the number of occasions when cs_t^i, the measure of the cost of liquidity provision of bank i on day s, falls below the 5th or below the 95th percentiles. The measure of risk of liquidity provision behaved the same. Absent of behavioural or structural factors that inûuence the timing of payments, the researchers expected each of the threshold values to be breached on around 5% of occasions. However, they were breached much more frequently. And there appeared to be some heterogeneity across banks: some never breach these thresholds, while others breach them on more than half of occasions. This provides very strong evidence that there are additional structural or behavioural reasons that may cause banks to provide a share of liquidity to payment systems which diûers from their share of payment activity.

A similar study was conducted by Waweru (2012), in his study, he sampled 18 commercial banks for which he collected secondary data from financial product reports, risk manuals and audited financial accounts. Despite banks operating in a risk environment for the period under study, investing in

secure transfer platforms such as RTGS s, and internet banking helped mitigate the risks. Therefore a negative correlation exists between financial innovations and risk management. The study concluded that financial innovations expose commercial banks to the following types of risks; credit risk, strategic risk, liquidity risk, country risk and reputational risk. It thus recommended that commercial banks engage in a more comprehensive risk mitigation policies so that a realistic risk index factor is evident at any given time. Liquidity is an important feature of any organization. Velmathi and Ganesan (2009) declared the importance of liquidity by stating that liquidity is the lubricating agent that facilitates a frictionless smooth functioning of all organization. In general, the term liquidity refers to the easy convertibility of assets into cash

In a 2006 study aimed at using synthetic data to measure the impact of RTGS on systemic risk in the Australian payment system, Wang and Docherty (2006) found that the systemic risk appeared to have been limited in the pre-RTGS system where the default of only two of the largest banks appear to have been capable of triggering contagion failures and where mainly foreign banks bore the brunt of systemic losses.

Beyani and Kasonde (2005), on financial innovation and the importance of modern risk management systems concluded that it is important for firms to adopt modern risk management systems. They noted that it is paramount for banks to have a futuristic view when formulating risk measurement systems, bearing in mind the rapid technological changes and rapid growth of markets. The study also revealed that institutional, process and product innovations would always present heightened risk levels owing to the level of unfamiliarity at first although this is expected to reduce over time. In addition, innovations may possess risks, which may remain hidden and only surface in times of stress.

Concept description

The conceptualized research model represents a decision to implement RTGS tempting the implementer to predict the risk that may come with the money transfer system. This implementation therefore provokes and yields the risks such as liquidity, credit, legal, technology failure, human error, principal, systemic and fraud.

Since the implementer is a business party seeking to maximize gain, this gain maximizing desire triggers risk analysis that determines with certainty the probability of occurrence of any of the anticipated risk and the associated consequence after occurrence.

Risk analysis, or 'probabilistic simulation' based on the Monte-Carlo simulation technique is a methodology by which the uncertainty encompassing the main variables projected in a forecasting model is processed in order to estimate the impact of risk on the projected results. It is a technique by which a mathematical model is subjected to a number of simulation runs, usually with the aid of a computer. During this process, successive scenarios are built up using input values for the project's key uncertain variables which are selected at random from multi-value probability distributions. The simulation is controlled so that the random selection of values from the specified probability distributions does not violate the existence of known or suspected correlation relationships among the project variables. The results are collected and analysed statistically so as to arrive at a probability distribution of the potential outcomes of the project and to estimate various measures of project risk

Risk analysis is simulated using Monte Carlo simulation whereby the highest mean, low kurtosis, low standard deviation and variability relates with low risk situations whereas high kurtosis, low mean, high standard deviation and variability relates with high risk. The simulation is performed over 10,000 times to arrive at accurate predictions of the risk profiles.

The risk analysis techniques are based on occurrence probability and impact of occurrence which if combined determines the riskiness of the event. This whole process in turn outputs a risk register that profiles the risk and determines courses of action to respond to the risks.

Proactive responses to risk include aspects of risk avoidance and risk transfer while reactive response provides for risk mitigation and acceptance. However, each response aspect has numerous specific responses to use to make the event safe and event in this work means real time gross settlement system.

Methodology

Research Design and Data Collection

To achieve the objectives of the research, an exploratory research was ideal and therefore adopted. During this research, data was collected from bank clients who have used the RTGS system before. This is because parties that have never used it or knows nothing about it would not give reasonable responses. A pilot questionnaire on ten bank clients that have used the system before and ten bank clients that have not used the system before showed a major difference in responses such that clients without experience could not understand the meaning of questions as well as the system itself. Most of them were not aware of the facility.

The research determined one population made up of individual clients equal to one thousand six hundred and seventy five clients (1675) users of the system. The researcher undertook to administer questionnaires to a sample of 323 clients generated from Yamanes's formula as follows:

n=N/(1+N0(e)0^2)

Where n is the sample size, N is the population size, and e is the level of precision which was set at 0.05 (5%) with a confidence level of 95%.

Applying the formula to derive the sample size gives the following;

n=1675/(1+16750(0.05)0^2)=323

These n = 323 were sampled according to proportion contribution to the population per bank. The researchers administered questionnaires at random at the bank entrance assisted by research assistants until the required number was reached

Results And Discussion

A 93% response rate was achieved in the study. Responses from bank clients on the risks experienced in their transactions using RTGS shows that settlement, human and replacement risks were the prominent few that affect the system and can potentially disrupt business whereas the rest of the seven risks have little occurrence probability and little effect on the system. After asking what could have caused technology failure, most clients revealed that power disruptions, fibre cut instances and internal failures in the RTGS hardware lead to the technology result of 22% of the failures experienced.

Most of the fraud and liquidity risk were intercepted after long lasting verification processes with authorities.

The researchers performed risk analysis from the responses of bank clients to determine the riskiness of each identified risk and produce a profile of each to show the associated variability and kurtosis change. The analysis was done by calculating the mean score and standard deviation from the responses, then calculating the risk level after which the result was simulated using Monte Carlo simulation in Crystal Ball to build the risk profile of each identified risk. The base case for each risk was set at zero (0) to mean a situation of no risk. The researchers used a Likert scale of 1 to 7 for both probability of occurrence and impact of occurrence of each risk

The impact scale ranged from 1 representing no impact and 7 representing catastrophic impact while the likelihood scale ranged from 1 representing highly unlikely to 7 representing highly likely.

Monte Carlo Analysis Output

After performing 10,000 simulations in Crystal Ball using Monte Carlo Simulation on the identified risks, the software produced results as shown in the table below listed in the order of risk according to kurtosis level (High kurtosis=high risk):

Table 1 : statistical variables of identified risks

Type of Risk	Skewness	Kurtosis	Standev
Settlement	0.7226	3.35	0.94
Human	0.7716	3.24	0.87
Replacement	0.7451	3.17	0.82
Legal	0.5541	2.77	0.87
Fire	0.5639	2.66	0.87
Credit	0.5154	2.65	0.81
Technology	0.5138	2.63	0.83
Hacking	0.5127	2.63	0.83
Liquidity	0.538	2.56	0.87
Theft	0.4491	2.55	0.84
Fraud	0.4718	2.53	0.85
Systematic	0.416	2.52	0.84
Operation	0.3774	2.35	0.84

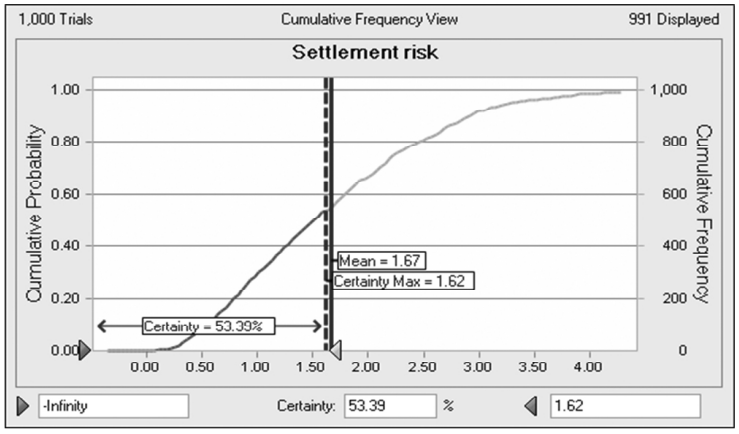

Fig. 1 : Risk profile of settlement risk.

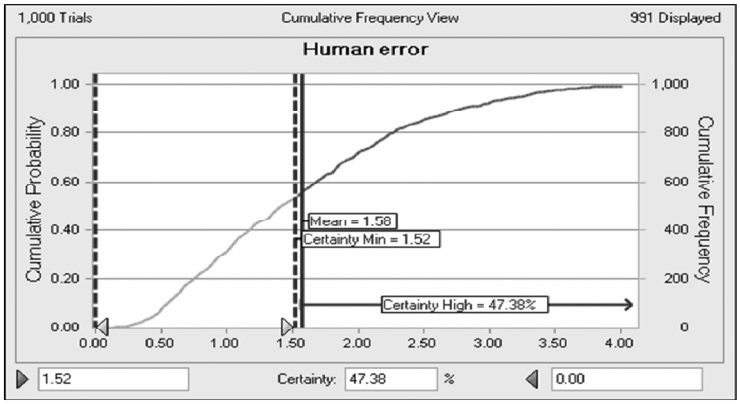

Fig. 2 : Risk profile of human risk

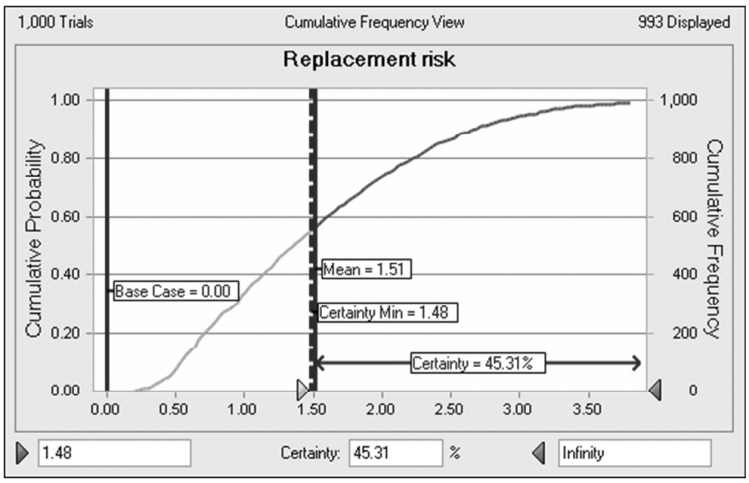

Fig. 3 : Risk profile of replacement risk.

Discussion of Results

The implication from these outputs is that errors of entry by operators pose a serious risk to RTGS because once posted, the transaction is irreversible. This is compounded by inadequate knowledge and skills to operate the software and related hardware. This is also related to inaccuracy in the transmission of payment messages. Errors/mistakes are a potential risk because there is a possibility of causing unnecessary system failure that will result in delaying the settlement of payments to clients

Similarly, inability to settle transactions can seriously impact the business of the recipient as well as put pressure on the remitting bank. Additionally, the replacement risk pose a danger if funds are used for other purposes and must be replaced abruptly as the remitting party may equally have to incur losses in an attempt to replace the funds.

Conclusions

The researchers have revealed that risks in RTGS include Fraud, liquidity, Human, settlement, Replacement, systematic, Legal, Credit, Fire, Technology, Hacking, operation and theft risk

It can therefore be concluded that RTGS system is risky and potentially catastrophic on bank business and bank clients. It can further be concluded that Settlement, Human and Replacement are the prominent risks with ability to cause catastrophic impact on business.

The implication in this research is that in terms of governance, the central bank must produce strict policies and procedures for operating the RTGS. Employees working on the RTGS must be given specific and differentiated roles to reduce on human error. Additionally, communication on the RTGS system must be widespread from the implementers to the clients.

For purposes of business continuity, the banks must implement disaster recovery mechanism and alternative hedges against the high and medium risks.

Recommendation for Future Research

It can be recommended that future research investigates the RTGS system and the capabilities of frontline staff operating the system to build detailed simulations so that the results from this study can be compared. Additionally, the future research can undertake to study the performance of the RTGS systems in African countries regarding risks associated with the system.

Acknowledgment

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Table 2 : Risk register derived from the results

Date Raised			Risk Description		
ID	Date Raised	Raised By	Risk	Description of Risk	Priority Rating
A	Mar-16	Kombe and Collins	Settlment	Delay between payment initiation and final transfer	1
B			Human	Error of entry by operator	2
C			Replacement	Inability to replace used funds	3
D			Legal	Litigation by bank client	4
E			Fire	Damage of RTGS hardware due to fire	5
F			Credit	Inadequacy of available funds	6
G			Technology	RTGS system internal and external failure	7
H			Hacking	Intruder accessing and commanding RTGS instructions	8
ID			Liquidity	remitting bank or institution unable to meet its obligation	9
J			Theft	Absolute loss of funds due to theft	10
K			Fraud	Indiscriminate move of funds	11
L			Systematic	Interbank transfer failures	12
M			Operation	Failures in internal control system	13

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Annexure - Questionnaires used in the study

Section A: Introduction (Optional)

Name of company: ……

Position of respondent: ……

Date:……

Please indicate by crossing or ticking in the box or give a brief explanation where necessaryon the following questions;

1. Rate your organizations performance with regards to the following characteristics

KEY							
Scale	1	2	3	4	5	6	7
Grade	Bad	Very poor	Poor	Average	Good	Very good	Excellent

a. Operation effectiveness and efficiency

	1	2	3	4	5	6	7
Service provision on promised time							
Communication with customers							
Translation of customer perception into service specifications							

b. Availability of resources

	1	2	3	4	5	6	7
Transport facilities							
Packaging material							
Technology, tracking systems							

2. Organizational culture

	1	2	3	4	5	6	7
Employee commitment towards work							
Employees adapting to changes							

3. Management quality

	1	2	3	4	5	6	7
Marketing research orientation							
Frequency of measuring service quality							
Service quality planning and control							

4. Reliability

	1	2	3	4	5	6	7
Dependable in handling service problems							
Performing service right the first time							
Providing service at the promised time							

5. Responsiveness

	1	2	3	4	5	6	7
Give prompt service							
Provide security on shipment							
Responding to requests							

a. Empathy

	1	2	3	4	5	6	7
Understanding customer needs							
Individual attention to customer							

6. Assurance

	1	2	3	4	5	6	7
Employee politeness							
Employee performance skill							

7. Tangibility

	1	2	3	4	5	6	7
Packaging appeal to customers							
Neat and professional employees							

Section A: Introduction

Name of Bank …….

Position of Respondent: ……

Date:……

Please indicate by crossing or ticking in the box or give a brief explanation where necessary on the following questions;

8. What are the risks associated with RTGS?

Risk/Prone	Tick
Credit Risk	
Liquidity Risk	
Settlement Risk	
Systematic Risk	
Technology Risk	
Human Error Risk	
Fire Risk	
Theft Risk	
Fraud Risk	
Hacking Risk	
Replacement Risk	
Principle Risk	
Operational Risk	
Legal Risk	

LIKELIHOOD SCALE

Scale	1	2	3	4	5	6	7
	Highly Unlikely	Very Unlikely	Unlikely	Less Likely	Likely	Very Likely	Highly Likely

9. Using the above scale, rate the likelihood of occurrence of RTGS risks

Risk/Likelihood of Occurrence	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Credit Risk							
Liquidity Risk							
Settlement Risk							
Systematic Risk							
Technology Risk							
Human Error Risk							
Fire Risk							
Theft Risk							
Fraud Risk							
Hacking Risk							
Replacement Risk							
Principle Risk							
Operational Risk							
Legal Risk							

IMPACT SCALE

Scale	1	2	3	4	5	6	7
	Non	Neutral	Minor	Moderate	Major	Critical	Catastrophic

10. Using the above scale, rate the severity or impact of occurrence of RTGS risks

Risk/Likelihood of Occurrence	1	2	3	4	5	6	7
Credit Risk							
Liquidity Risk							
Settlement Risk							
Systematic Risk							
Technology Risk							
Human Error Risk							
Fire Risk							
Theft Risk							
Fraud Risk							
Hacking Risk							
Replacement Risk							
Principle Risk							
Operational Risk							
Legal Risk							

11. What action against each of these risks have you deliberately developed?

No	Risk	Response and or programmed management action
1	Credit Risk	
2	Liquidity Risk	
3	Settlement Risk	
4	Systematic Risk	
5	Technology Risk	
6	Human Error Risk	
7	Fire Risk	
8	Theft Risk	
9	Fraud Risk	
10	Hacking Risk	
11	Replacement Risk	
12	Principle Risk	
13	Operational Risk	
14	Legal Risk	

Other actions:……....

12. Do you have a risk register for the risks associated with RTGS in your organization?

Yes ☐ No ☐

13. Have/do you educate clients regarding RTGS risks before conducting RTGS transactions?

Yes ☐ No ☐

14. In relation to question (6) above, do you think that RTGS customers make informed decisions before transacting?

Scale	1	2	3	4	5	6	7
Description	Highly Unlikely	Very Unlikely	Unlikely	Less Likely	Likely	Very Likely	Highly Likely

15. If your answer on question (6) is yes, how do you educate your clients concerning RTGS risks?

1	2	3	4	5	6	7
Instructions on Form	Open Display	Risk Register	Teller Interview	Telephone	Email	Transfer Report