INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE, ECONOMICS & MANAGEMENT

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

Indexed & Listed at:

Ulrich's Periodicals Directory ©, ProQuest, U.S.A., EBSCO Publishing, U.S.A., Cabell's Directories of Publishing Opportunities, U.S.A.,

Open J-Gage, India [link of the same is duly available at Inflibnet of University Grants Commission (U.G.C.)],

Index Copernicus Publishers Panel, Poland with IC Value of 5.09 & number of libraries all around the world.

Circulated all over the world & Google has verified that scholars of more than 2151 Cities in 155 countries/territories are visiting our journal on regular basis.

Ground Floor, Building No. 1041-C-1, Devi Bhawan Bazar, JAGADHRI – 135 003, Yamunanagar, Haryana, INDIA

http://ijrcm.org.in/

CONTENTS

CALL FOR MANUSCRIPTS

We invite unpublished novel, original, empirical and high quality research work pertaining to recent developments & practices in the area of Computer, Business, Finance, Marketing, Human Resource Management, General Management, Banking, Insurance, Corporate Governance and emerging paradigms in allied subjects like Accounting Education; Accounting Information Systems; Accounting Theory & Practice; Auditing; Behavioral Accounting; Behavioral Economics; Corporate Finance; Cost Accounting; Econometrics; Economic Development; Economic History; Financial Institutions & Markets; Financial Services; Fiscal Policy; Government & Non Profit Accounting; Industrial Organization; International Economics & Trade; International Finance; Macro Economics; Micro Economics; Monetary Policy; Portfolio & Security Analysis; Public Policy Economics; Real Estate; Regional Economics; Tax Accounting; Advertising & Promotion Management; Business Education; Management Information Systems (MIS); Business Law, Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labor Relations & Human Resource Management; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; Public Administration; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism, Hospitality & Leisure; Transportation/Physical Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Digital Logic; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Multimedia; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic and Web Design. The above mentioned tracks are only indicative, and not exhaustive.

Anybody can submit the soft copy of his/her manuscript **anytime** in M.S. Word format after preparing the same as per our submission guidelines duly available on our website under the heading guidelines for submission, at the email address: **infoijrcm@gmail.com**.

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

1. **COVERING LETTER FOR SUBMISSION:**

DATED: ____________

THE EDITOR
IJRCM

Subject: **SUBMISSION OF MANUSCRIPT IN THE AREA OF.**

(e.g. Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/Engineering/Mathematics/other, please specify)

DEAR SIR/MADAM

Please find my submission of manuscript entitled '____' for possible publication in your journals.

I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published elsewhere in any language fully or partly, nor is it under review for publication elsewhere.

I affirm that all the author (s) have seen and agreed to the submitted version of the manuscript and their inclusion of name (s) as co-author (s).

Also, if my/our manuscript is accepted, I/We agree to comply with the formalities as given on the website of the journal & you are free to publish our contribution in any of your journals.

NAME OF CORRESPONDING AUTHOR:
Designation:
Affiliation with full address, contact numbers & Pin Code:
Residential address with Pin Code:
Mobile Number (s):
Landline Number (s):
E-mail Address:
Alternate E-mail Address:

NOTES:
a) The whole manuscript is required to be in ***ONE MS WORD FILE*** only (pdf. version is liable to be rejected without any consideration), which will start from the covering letter, inside the manuscript.
b) The sender is required to mentionthe following in the **SUBJECT COLUMN** of the mail:
New Manuscript for Review in the area of (Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/Engineering/Mathematics/other, please specify)
c) There is no need to give any text in the body of mail, except the cases where the author wishes to give any specific message w.r.t. to the manuscript.
d) The total size of the file containing the manuscript is required to be below **500 KB**.
e) Abstract alone will not be considered for review, and the author is required to submit the complete manuscript in the first instance.
f) The journal gives acknowledgement w.r.t. the receipt of every email and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of manuscript, within two days of submission, the corresponding author is required to demand for the same by sending separate mail to the journal.

2. **MANUSCRIPT TITLE**: The title of the paper should be in a 12 point Calibri Font. It should be bold typed, centered and fully capitalised.

3. **AUTHOR NAME (S) & AFFILIATIONS**: The author (s) **full name**, **designation**, **affiliation** (s), **address**, **mobile/landline numbers**, and **email/alternate email address** should be in italic & 11-point Calibri Font. It must be centered underneath the title.

4. **ABSTRACT**: Abstract should be in fully italicized text, not exceeding 250 words. The abstract must be informative and explain the background, aims, methods, results & conclusion in a single para. Abbreviations must be mentioned in full.

5. **KEYWORDS:** Abstract must be followed by a list of keywords, subject to the maximum of five. These should be arranged in alphabetic order separated by commas and full stops at the end.

6. **MANUSCRIPT**: Manuscript must be in ***BRITISH ENGLISH*** prepared on a standard A4 size ***PORTRAIT SETTING PAPER***. It must be prepared on a single space and single column with 1" margin set for top, bottom, left and right. It should be typed in 8 point Calibri Font with page numbers at the bottom and centre of every page. It should be free from grammatical, spelling and punctuation errors and must be thoroughly edited.

7. **HEADINGS**: All the headings should be in a 10 point Calibri Font. These must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.

8. **SUB-HEADINGS**: All the sub-headings should be in a 8 point Calibri Font. These must be bold-faced, aligned left and fully capitalised.

9. **MAIN TEXT**: The main text should follow the following sequence:

   INTRODUCTION

   REVIEW OF LITERATURE

   NEED/IMPORTANCE OF THE STUDY

   STATEMENT OF THE PROBLEM

   OBJECTIVES

   HYPOTHESES

   RESEARCH METHODOLOGY

   RESULTS & DISCUSSION

   FINDINGS

   RECOMMENDATIONS/SUGGESTIONS

   CONCLUSIONS

   SCOPE FOR FURTHER RESEARCH

   ACKNOWLEDGMENTS

   REFERENCES

   APPENDIX/ANNEXURE

   It should be in a 8 point Calibri Font, single spaced and justified. The manuscript should preferably not exceed ***5000 WORDS***.

10. **FIGURES & TABLES**: These should be simple, crystal clear, centered, separately numbered & self explained, and **titles must be above the table/figure**. **Sources of data should be mentioned below the table/figure**. It should be ensured that the tables/figures are referred to from the main text.

11. **EQUATIONS**:These should be consecutively numbered in parentheses, horizontally centered with equation number placed at the right.

12. **REFERENCES**: The list of all references should be alphabetically arranged. The author (s) should mention only the actually utilised references in the preparation of manuscript and they are supposed to follow **Harvard Style of Referencing**. The author (s) are supposed to follow the references as per the following:

- All works cited in the text (including sources for tables and figures) should be listed alphabetically.
- Use (**ed.**) for one editor, and (**ed.s)** for multiple editors.
- When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc, in chronologically ascending order.
- Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
- The title of books and journals should be in italics. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
- For titles in a language other than English, provide an English translation in parentheses.
- The location of endnotes within the text should be indicated by superscript numbers.

PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:

BOOKS

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

UNPUBLISHED DISSERTATIONS AND THESES

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES

- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

WEBSITES

- Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

PERCEIVED EASE OF ACCESS/USE, PERCEIVED USEFULNESS, PERCEIVED RISK OF USAGE AND PERCEIVED COST OF USAGE OF MOBILE BANKING SERVICES AND THEIR EFFECT ON CUSTOMER COMMITMENT FROM SELECTED COMMERCIAL BANKS IN RWANDA

MACHOGU MORONGE ABIUD
LECTURER
ADVENTIST UNIVERSITY OF CENTRAL AFRICA
KIGALI

LYNET OKIKO
RESEARCH SCHOLAR
MANAGEMENT UNIVERSITY OF EASTERN AFRICA BARATON
KIGALI

VICTORIA KADONDI
LECTURER
ADVENTIST UNIVERSITY OF CENTRAL AFRICA
KIGALI

ABSTRACT
M-banking is a fully automatic service for traditional banking customer's products based on information technology platforms. M-banking services provide customer access to accounts, the ability to move their money between different accounts or making payments via e-channels. Banking in several developing countries has transcended from a traditional brick-and mortar model of customers queuing for services in the banks to modern day banking where banks can be reached at any point for their services. This can be attributed to the tremendous growth in mobile penetration in many countries across the globe including Rwanda. This study was conducted with the aim of identifying the customer's perception towards perceived ease of access/use, perceived risk, perceived cost, and perceived usefulness to the usage of mobile banking and its influence on customer commitment to the various banks under study in the Rwandan banking industry. Data for this study was collected using a self structured questionnaire. Out of 350 questionnaires that were distributed, 305 where retrieved indicating (87%) return success rate. In the survey, all factors under study – perceived ease of access/use, perceived risk, perceived cost, and perceived usefulness were seen to have an influence on the commitment of the customers towards the various banks under study-(Agaseke, BK, BPR).

KEYWORDS
Mobile banking, quality of service delivery, perceived cost, perceived ease of access/use, perceived risk.

INTRODUCTION
The terms Mobile Phone banking and mobile banking (M-Banking) are used interchangeably. The term M-Banking is used to denote the access to banking services and facilities offered by financial institutions such as account-based savings, payment transactions and other products by use of an electronic mobile device. Mobile banking has yielded a multiple effect on the number of solutions available to clients. This is in addition to more efficient transactional environment and the high substitution of banking points (Njenga, 2012).

Mobile Banking is a financial transaction conducted by logging on to a Bank's website using a cell phone, such as viewing account balances, making transfers between accounts, or paying bills, performing balance checks, account transactions, payments etc. via a mobile device such as a mobile phone. In recent time mobile banking is most often performed via SMS or the Mobile Internet but can also use special programs called clients downloaded to the mobile device. The spread of mobile phones across the developed and the developing world is one of the most remarkable technology stories of the past decade. Propelled by prepay cards and inexpensive handsets, hundreds of millions of first-time telephone owners have made voice calls and text messages part of their daily lives. However, many of these same new mobile users live in informal and/or cash economies, without access to financial services that others take for granted. Indeed, across the developing world, there are probably more people with mobile handsets than with bank accounts (Donner, 2008).

Many companies in the financial services sector have been quick to implement Internet capabilities, and electronic service is becoming a viable option for interaction between financial service providers and their customers. Technology, in particular, has been increasingly employed in service organizations to enhance customer service quality and delivery, reduce costs, and standardize core service offerings, thus enabling Mobile banking service customers to manage their accounts with ease.

MOBILE BANKING SERVICES
Banks offering mobile access are mostly supporting some or all of the following services:

A. ACCOUNT INFORMATION
- Mini-statements and checking of account history
- Alerts on account activity or passing of set thresholds
- Monitoring of term deposits
- Access to loan statements
- Access to card statements
- Mutual funds / equity statements
- Insurance policy management
- Pension plan management

B. PAYMENTS & TRANSFERS
- Domestic and international fund transfers
- Micro-payment handling
- Mobile recharging
- Commercial payment processing
- Bill payment processing

C. INVESTMENTS
- Portfolio management services
- Real-time stock quotes
- Personalized alerts and notifications on security prices

D. SUPPORT
- Status of requests for credit, including mortgage approval, and insurance coverage
- Check (cheque) book and card requests
- Exchange of data messages and email, including complaint submission and tracking

E. CONTENT SERVICES
- General information such as weather updates, news
- Loyalty-related offers
- Location-based services

One way to classify these services depending on the originator of a service session is the 'Push/Pull' nature. 'Push' is when the bank sends out information based upon an agreed set of rules, for example your banks sends out an alert when your account balance goes below a threshold level. 'Pull' is when the customer explicitly requests a service or information from the bank, so a request for your last five transactions statement is a Pull based offering.

Rwanda has a successfully growing economy as its telecommunication industry has advanced tremendously in the recent years. Rwanda's mobile technology, which had started to grow strongly over the last few years, is gearing up for further growth. The mobile population has been increasing remarkably with three mobile companies operating in Rwanda. People belonging to all income groups are using this technology as a result of foreign investment in Rwanda and reduced telecommunication rates. The most common sercvices offered by Banks in Rwanda to their customers today include: Account alerts, security alerts and reminders, Account balances, updates and history, Customer service via mobile, Branch or ATM location information, Bill pay(i.e. electric bill),deliver online payments by secure agents and mobile client applications, Funds transfers, Transaction verification, Mortgage alerts (Saleem & Rashid, 2011). The present study aims at examining the impact of perceived usefulness, perceived ease of use, perceived cost, perceived risk of mobile banking services and their influence on customer commitment to the various banks under study.

STATEMENT OF THE PROBLEM

The perception of customers on the quality of service delivery is an important aspect that needs to be examined for those clients who have moved to use mobile banking. Mobile banking has proven popular with customers since its inception. However, BPR has not carried out any analysis to evaluate the effects that mobile banking services has on the commitment of the customers to the bank. This research is therefore geared towards analyzing and finding out the perception of the clients view on the quality of service, evaluated through perceived usefulness, perceived ease of access/use, perceived cost, and perceived risk, as revealed and portrayed by mobile banking and the effect it has towards the commitment of the customers to the bank.

NULL HYPOTHESIS

There is little doubt that hypotheses are important and indispensable tools of scientific research (Kerlinger & Lee, 1985). Based on the literature review and the conceptual framework under this study the following hypotheses were developed for statistical analysis.

$H_0$1: Perceived cost has no influence on customer commitment

$H_0$2: Perceived ease of access/use has no influence on customer commitment

$H_0$3: Perceived risk has no influence on customer commitment

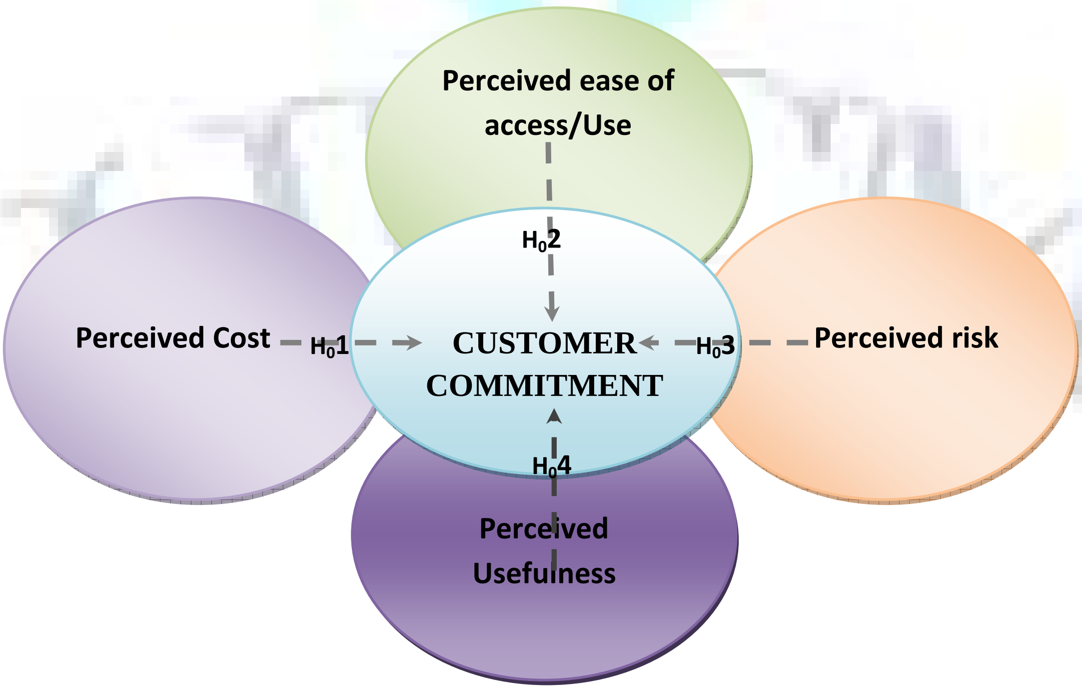
$H_0$4: Perceived usefulness has no influence on customer commitment

$H_0$5 There is no significant relationship between independent and dependent variables

CONCEPTUAL FRAMEWORK

The conceptual framework presented in figure 1 summarizes the relationship between dependent and independent variables that are used as the fundamental basis for the study. Using the Technology Acceptance Model, Pikkareinen et al (2004) opined that perceived usefulness and perceived ease of use among other factors significantly affects the use of e-banking, other factors being: Perceived cost, and perceived risk (Odumeru, 2007).

FIGURE 1: CONCEPTUAL FRAMEWORK ON INDEPENDENT AND DEPENDENT VARIABLES



THEORETICAL AND RELATED LITERATURE REVIEW

Banking industry is driven by the technological innovation, market uncertainty and competition. There has been a rapid shift from traditional banking to electronic banking. Competitive banks make significant investments in adopting new technology to align business strategies, enable innovative functional operations and provide extended customer services (Saleem & Rashid, 2011).

Mobile banking services can be described as the newest services in electronic banking. They are performed using mobile phones or other mobile devices. Mobile banking services are provided through a convention of connection to these services. Access to the database is made through a password and a customer code. Customers can check their balance and make adjustments between accounts. The potential for providing mobile banking services may be far greater than services thru typical desktop access, as there are several times more mobile phone users than online pc users. There are two main types of technology available for use in mobile banking: WAP (wireless application protocol) and WIG (wireless internet gateway). The first one is an application environment and set of communication protocols for wireless.

Devices built to enable manufacturer, vendor and platform independent access to the internet and advanced telephony services. The other one (WIG) is a sms-based service in which a menu of banking services options is downloaded from the bank to the phone. This enables the user to browse to all bank services options and through their accounts and to conduct specific tasks (Daniela, Simona, & Drago, 2010). The main problems in developing mobile banking as highlighted by Daniela, Simona, & Drago, (2010) inlcude: Internet connectivity costs, Difficult user interface, Lack of awareness amongst customers, Limitation in functionality of mobile devices, Accessibility issues, Security concerns, Organizational changes, Small number of choices, and technology overload.

PERCEIVED EASE OF ACCESS/USE AND PERCEIVED USEFULNESS

Numerous researchers have investigated perceived usefulness and perceived ease of use as a valid construct to measure customer commitment level (Saleem & Rashid, 2011). Given the expansion of the use of mobile banking services, customers inevitably will have to receive their financial transactions information through the mobile services networks. Thus, providing simple and easy instructions, comprehensive menus, and ease of use the mobile banking services influence the users' behavioral intentions. There are many studies that confirm the effect of variable "ease of access/use" on variable "perception of the usefulness". Perceived usefulness and perceived ease of use are the two components of Technology Acceptance Model (TAM). Many authors used the TAM and various extended versions of TAM to research consumer acceptance of mobile banking applications (Chung & Kwon, 2009; Gu, Lee, & Suh, 2009; Kleijnen, Wetzels, & Ruyter, 2004; Luarn & Lin, 2005; Yu & Fang, 2009).

Perceived usefulness is the extent to which a person believes that using a particular system will enhance his or her performance, while perceived ease of use is the extent to which a person believes that using a particular system will be free of effort". Perceived usefulness and perceived ease of use is significant factors affecting acceptance of an information system or new technologies. Prior research has empirically found positive relationship between perceived ease of use and perceived usefulness as critical factors on the use of e- banking (Safeena, Hundewale, & Kamani, 2011). Rogers (1962) affirmed perceived ease of use is the term that represents the degree to which an innovation is perceived not to be difficult to understand, learn or operate. He further stated that perceived ease of use is the degree to which consumers perceive a new product or service as better than its substitutes (Rogers, 1983). Similarly, Zeithaml et al. (2002) stated that the degree to which an innovation is easy to understand or use could be considered as perceived ease of use.

According to Mathieson (1991), the perceived ease of use is the consumer's perception that banking on the internet will involve a minimum of effort. Similarly, Consult (2002) noted that perceived ease of use refers to the ability of consumers to experiment with a new innovation and evaluate its benefits easily. He also affirmed that the drivers of growth in electronic banking are determined by the perceived ease of use which is a combination of convenience provided to those with easy internet access, the availability of secure, high standard electronic banking functionality, and the necessity of banking services.

Prior studies have also shown that while the direct effects of perceived ease of use remain important over time, the indirect effect of perceived ease of use becomes stronger; there is also a significant influence of perceived ease of use, and perceived usefulness on the intention to use Internet banking (Venkatesh & Morris, 2000; Riyadh, Shahriar, & Islam, 2008). A system which is easier to use will facilitate more system use and task accomplishment than systems that are hard to use (Venkatesh & Morris, 2000).

In their research Chavidi and Mulabagula (2004), found that ease of access/use to relevant information or service is the most important feature in mobile banking. Perceived ease of use may contribute towards performance, and therefore, near-term perceived usefulness and the lack of it can cause frustration, and therefore, impair the commitment of a customer to either the service or the bank. Mobile services in particular that are easy to use will be less threatening to individuals, in that, they might find them less complex or tedious to use. For example, there is evidence in the media that using certain services on a mobile device can be quite tedious, especially when browsing Internet-like interfaces on mobile devices (Rao & Troshani, 2007). Based these findings there is a need for the banks to minimize complicated procedures and need to enhance ease of use to attract more consumers. Ease of use is enhanced by the use of simple technology and applications that are easy to operate; such that little technical knowledge is required in using the system.

PERCEIVED RISK

Perceived risk is the consumer's subjective expectation of suffering a loss in pursuit of a desired outcome' (Wang et al., 2003). Perceived risk is multi-dimensional in nature and captures performance, physical, financial, psychological, social loss and time (Greatorex and Mitchell, 1994). Risk barrier is the degree of potential risks an innovation may entail. Gerrard et al. found that risk is the main factor that explains why consumers do not use mobile banking. In their research on the resistance to mobile banking adoption in Egypt: a cultural perspective, Elbadrawy and Abdel, (2011), note that the first type of risk is physical risk: harm to person or property that may be inherent in the innovation. The second type of risk is economic risk, the higher the cost of an innovation, as with capital goods, the higher the perceived economic risk. The third type of risk is due to performance uncertainty and is known as functional risk. The customer worries that the mobile banking may not have been fully tested and that therefore it is possible that it may not function properly or reliably. The fourth type of risk is social risk. Customers do resist the usage of mobile banking because they feel that they will face social ostracism or peer ridicule when they adopt it.

PERCEIVED COST

Kohli (2004) asserted that the mobile banking service gives customers the convenience of account access information and real-time transaction capabilities, he further consents that mobile banking does not only improve one's access to financial transactions but also reducing one's transaction costs. Mobile banking as indicated by Pai, Ghosh, and Benoy, (2011) it serves as a cost-efficient mechanism, with the cost of transaction on a mobile estimated to be one-tenth of the transaction cost of a bank branch and one-sixth the cost of a transaction through an ATM. Due to these advantages over conventional forms of banking, mobile banking has significant potential and is likely to witness strong growth.

Anyasi & Otubu, (2007) argues that ffinancial institutions, which have had difficulty providing profitable services through traditional channels to poor clients, see m-banking/m- payments as a form of "branches banking", which lowers the costs of serving low-income customers. The same concept is conceived by Njenga, (2012) in his research on mobile phone banking: Usage experiences in Kenya, where he alludes that m-banking reduces the cost of basic banking services to customers with over 60 percent from what it would cost through traditional channels. The electronically managed transactions result in huge cost savings, the benefits of which are transferred to the users.

RESEARCH METHODOLOGY

The research employed and utilized descriptive and correctional research design. The choice of these designs was informed by the ability of descriptive method to profile respondents categorically (Greener, 2008) and the correlation was to examine the relationship between variables (Wallace and Wray, 2006). Primary data was used for the research. The research employed a self structured questionnaire that covered all the variables under study. The questionnaire was specifically designed to accomplish the objectives of the study. The questionnaire consisted of three sections, and employed the Likert scale of four points: Strongly Agree, Agree, Disagree, and Strongly Disagree. The first section collected information such as age, gender, level of education, and the number of years that the respondent has been using mobile banking. The second section covered issues to deal with the quality service offered via mobile banking**.** The section had ten questions that covered the independent variables – perceived ease use/access and usefulness, perceived cost and perceived cost. The third section evaluated the respondent's response towards their commitment to the bank based on the services received from the mobile banking services from the respective banks. The questionnaire was administered using a convenience sample method to the customers belonging to three banks in Kigali city. Of the 350 questionnaires distributed for this study, 305 of them were retrieved/useable from the respective banks, giving a response rate of 87 per cent, which was considered satisfactory for subsequent analysis. The sample size decisions were primarily based on cost considerations.

TABLE 1.1: DISTRIBUTION OF RETRIEVED QUESTIONNAIRES FROM THE RESPECTIVE BANKS UNDER STUDY

Name of Bank	Frequency of retrieved questionnaire	Percent
Agaseke	80	26.2
Bank of Kigali	100	32.8
Banque Populaire du Rwanda	125	41.0
Total	305	100.0

Primary data was used for the research. This was collected through a self-constructed questionnaire. The questionnaire was constructed on a likert-scale. The face, content, and construct validity (Greener, 2008) were established through experts' intervention from the field of management. The respondents' participation was solicited through a consent letter and the data gather are for academic purpose only.

DATA ANALYSIS, INTERPRETATIONS AND DISCUSSIONS

The data was analyzed by using the Statistical Package for Social Sciences (SPSS 17 version). Hypothesis testing was performed on the basis of regression analyses. Similarly, correlation analysis is performed to check the intensity of association between the variables of the study.
The profile of the respondents was analyzed through descriptive statistics as presented in Table 1.1 and it indicates that a total of 155 male representing (52.5%) and 150 female, representing (46.0%) of the total 274 respondents used in the study.

TABLE 1.2: DISTRIBUTION OF THE RESPONDENTS BY DEMOGRAPHIC FACTORS

Demographic Variables	Categories	Frequency	Percentage
Gender	Male	155	50.8%
	Female	150	49.2%
Age	Below 35 years old	150	49.2%
	36 -50 years	120	39.3%
	51 and above	35	11.5%
Educational Level	Diploma / Certificate	125	41.0%
	Bachelors	85	27.9%
	Masters	80	26.2%
	PhD	15	4.9%
How long the customer has used Mobile banking services	below 1 years	110	36.1%
	1 -2 years	13	4.2%
	3 - 4 years	182	59.6%

Table 1.2 further indicates that out of the 274 respondents, 125 represented (41.0%) has a certificate or Diploma, 85 respondents (27.9%) has Bachelors Degree, 80 respondents (26.2%) with Masters Degree, 15 respondents (4.9%) have a PhD. Table 1.2 also indicates the duration in which the respondents have been using mobile banking services. 110 respondents representing 36.1% indicated that they have been using the Mobile banking services for less than one year, 13 respondents representing 4.2% have been using the service for between one and two years, and 182 respondents representing 59.6% indicated to have been using the service between three and four years.

TABLE 1.3: SUMMARY OF THE RESPONDENT'S PERCEPTION ON THE PERCEIVED EASE OF ACCESS/USE, PERCEIVED COST, PERCEIVED RISK, PERCEIVED USEFULNESS OF MOBILE BANKING SERVICES TO CUSTOMER COMMITMENT

Variables	N	Min	Max	Mean	Std. Dev
Perceived Ease of Access/Use	305	1.00	4.00	3.2568	.66884
Perceived cost	305	1.00	4.00	3.3770	.54234
Perceived risk,	305	1.00	4.00	3.4623	.46952
Perceived usefulness	305	1.00	4.00	3.4426	.46695

From table 1.3 all the variables had a mean greater than 3.00. This is a clear indication that all these variables have a positive influence on the respondent's perception of usage.

TABLE 1.4: SUMMARY OF THE CORRELATION MATRIX BETWEEN CUSTOMER COMMITMENT AND PERCEIVED EASE OF ACCESS/USE, PERCEIVED COST, PERCEIVED RISK, PERCEIVED USEFULNESS

Variables	Significant Level	Pearson Correlation Coefficient
Perceived Ease of Access/Use	*0.000*	*0.889***
Perceived cost	*0.000*	*0.905***
Perceived risk	*0.000*	*0.883***
Perceived usefulness	*0.000*	*0.875***

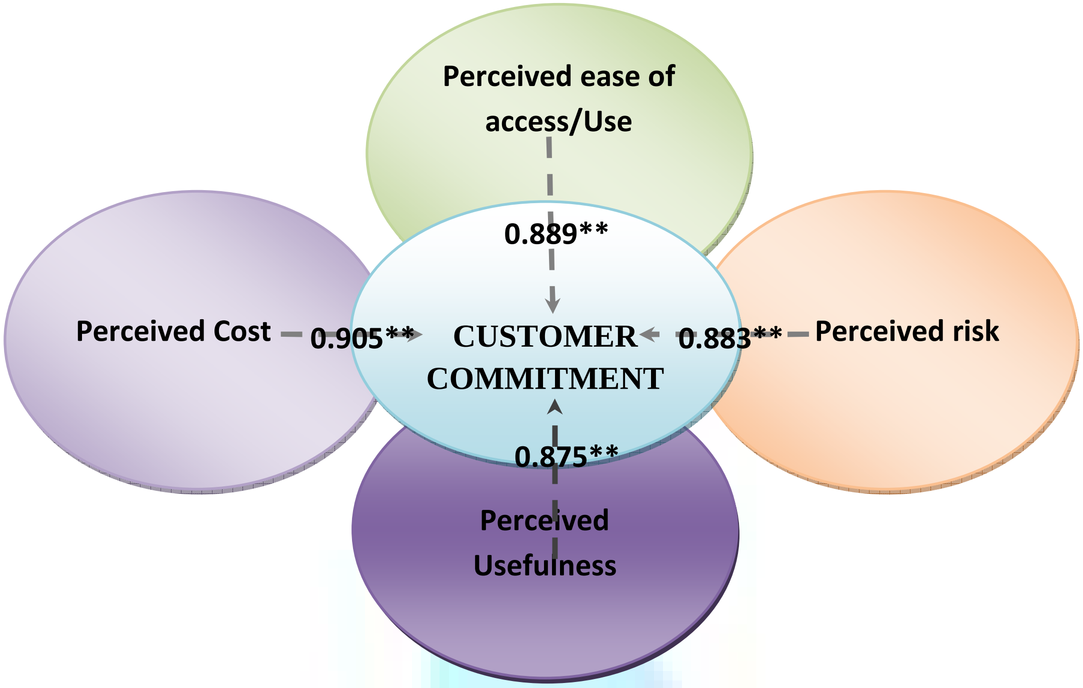


TABLE 1.5: SUMMARY OF THE OUTPUT OF THE HYPOTHESIS

Null Hypothesis	Correlation Coefficient	p-value	Accept/Reject Null Hypothesis
$H_0$1: Perceived cost has no influence on customer commitment	0.889**	0.000	**Reject**
$H_0$2: Perceived ease of access/use has no influence on customer commitment	0.905**	0.000	**Reject**
$H_0$3: Perceived risk has no influence on customer commitment	0.883**	0.000	**Reject**
$H_0$4: Perceived usefulness has no influence on customer commitment	0.875**	0.000	**Reject**
$H_0$5 There is no significant relationship between independent and dependent variables	0.911**	0.000	**Reject**

The entire null hypotheses are dropped and the alternative hypothesis upheld since for all the p-values are less than 0.05.

ECONOMETRIC MODEL/ MULTIPLE REGRESSION ANALYSIS

An econometric model is developed for the study in order to testify the relationship between the dependent and independent variables and to test the hypotheses relevant for the study. The regression is a statistical relationship between two or more variables. When their are two or more independent variables, the analysis that describes such relationship is multiple regression. This analysis is adopted where there is one dependent variable that is resumed to be in relation with the function of two or more independent variables. In multiple regression, a linear composite of explanatory variable is formed, in such a way that it has maximum correlation with an active criterion variable. The main objective of using this technique is to predict the variability of the dependent variable, based on it co-variance with all the independent variables.

The result of the independent variables -Perceived cost (PC), Perceived Risk (PR), perceived ease of use/access (PEU/A), Perceived Usefulness (PU), were used to predict the dependent variable -customer commitment (CC). Customer commitment as a function of quality mobile banking services was depicted in the form of the following equation.

CC= α0 + β1(PC) + β2(PR) + β3(PEU/A) + β4(PU) + ε

where: α0-intercept, Customer Commitment-CC, Perceived cost Factor-PC, Perceived Risk Factor-PR, perceived ease of use/access factor–PEU/A, Perceived Usefulness factor -PU, and ε-coefficient of error term.

The customer commitment to the bank due to the quality of mobile banking services was studied by selecting four independent factors. The results were subjected to multiple regression analysis as shown in table 1.6.

TABLE 1.6: REGRESSION CO-EFFICIENT

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.159	.101		1.574	.117
	Perceived ease of access/use	.344	.046	.306	7.549	.000
	Perceived Risk	.308	.025	.390	12.300	.000
	Perceived Cost	.307	.043	.316	7.199	.000
	Perceive Usefulness	.003	.021	.003	.165	.869

Table 1.6 indicates the standardized co-efficient that explain the factors that influence customer commitment. The beta value (.306) with a sig .000 for perceived ease of access/use, the beta value (.390) with the sig .000 for perceived risk, the beta value (.316) with a sig .000 for perceived cost shows perceived ease of access/use, perceived risk, and perceived cost positively influence the customers commitment to the bank, since the p-value 0.000 is less than 0.05. The beta (.033) with a sig .869 show that there is insignificant relationship between perceived usefulness and customer commitment because the p-value.869 is greater than 0.05. The results of model fit are presented in table 1.7. The factors included in the multiple regression model are capable of explaining 90% Variation in the overall customer commitment.

TABLE 1.7: MODEL FIT

Model Summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.950[a]	.903	.901	.16574
a. Predictors: (Constant), Perceived Usefulness, Perceived Cost, Perceived Risk, Perceived ease of access				
b. Dependent Variable: Customer Commitment				

The adjusted R-square in table 1.7 highlights that the dependent variable customer commitment is influenced by 90% by the independent variable i.e. Perceived Usefulness, Perceived Cost, Perceived Risk, and Perceived ease of access and this is statistically significant at 1% level and 5% level respectively. It explains that Perceived Usefulness, Perceived Cost, Perceived Risk, and Perceived ease of access are liable for the commitment of the customer to the bank. The above mentioned model has also significant, as examined with the aid of ANOVA, as indicated in table 1.8.

TABLE 1.8: ANOVA

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	75.008	4	18.752	682.661	.000[b]
	Residual	8.103	295	.027		
	Total	83.111	299			
a. Dependent Variable: Commitment						

b. Predictors: (Constant), Perceived Usefulness, Perceived cost, Perceived Risk, Perceived ease of access/use

CONCLUSION

Based on the findings, of this research, it can be concluded that: perceived ease of access/use, Perceived Usefulness, Perceived cost, and Perceived Risk on the mobile banking services, have an influence on the commitment of the customers to the bank.

REFERENCES

1. Chavidi N., and Mulabagula G. (2004). Barriers to mobile Internet Banking services adoption: an empirical study in Klang valley of Malaysia. The Internet Business Review, Issue No. 1.
2. Chung, N., & Kwon, S. J. (2009). The effect of customers' mobile experience and technical support on the intention to use mobile banking. CyberPsychology and Behavior, 12(5), 539-543.
3. Consult AN (2002). China Online Banking Study. Available: http://estore.chinaonline. com/chinonlbanstu.html.
4. Daniela, B., Simona, M., & Drago, P. (2010, July). ELECTRONIC BANKING – ADVANTAGES FOR FINANCIAL SERVICES DELIVERY. Babes-Bolyal University, Cluj-Napoca.
5. Daniela, B., Simona, M., & Drago, P. (2010, July). ELECTRONIC BANKING – ADVANTAGES FOR FINANCIAL SERVICES DELIVERY. Babes-Bolyal University, Cluj-Napoca.
6. Elbadrawy, R., & Abdel, R. A. (2011, November). RESISTANCE TO MOBILE BANKING ADOPTION IN EGYPT: A CULTURAL PERSPECTIVE. *International Journal of Managing Information Technology (IJMIT), 3*.
7. Greatorex, M. and V. W. Mitchell (1994). "Modeling consumer risk reduction preferences from perceived loss data." Journal of Consumer Marketing 15(4): 669-685.
8. Gu, J. C., Lee, S. C., & Suh, Y. H. (2009). Determinants of behavioral intention to mobile banking. Expert Systems with Applications, 36, 11605-11616.
9. Kleijnen, M., Wetzels, M., & Ruyter, K. (2004). Consumer acceptance of wireless finance. Journal of Financial Services Marketing, 8(3), 205-217.
10. Kohli, K. (2004). SMS in banking. *Paladion Knowledge Series*, Issue January 2004.
11. l Riyadh, A. N., Shahriar , A. M., & Islam, N. (2008, August). The adoption of e-banking in developing countries: A theoretical model for SMEs. Korea.
12. l Riyadh, A. N., Shahriar , A. M., & Islam, N. (2008, August). The adoption of e-banking in developing countries: A theoretical model for SMEs. Korea.
13. Luarn, P., & Lin, H. H. (2005). Towards an understanding of the behavioral intention to use mobile banking. Computers in Human Behavior, 21, 873-891.
14. Mathieson K (1991). Predicting user intentions: comparing the technology acceptance model with the theory of planned behavior. Info. Syst. Res. 2(3): 173-191.
15. Odumeru1, J. A. (2007). The Acceptance of E-banking by Customers in Nigeria.
16. Rao, S., & Indrit Troshani. (2007, August). Journal of Theoretical and Applied Electronic Commerce Research, 2(2), 61 - 73.
17. Rao, S., & Indrit Troshani. (2007, August). Journal of Theoretical and Applied Electronic Commerce Research, 2(2), 61 - 73.
18. Rao, S., & Indrit Troshani. (2007, August). *Journal of Theoretical and Applied Electronic Commerce Research, 2*(2), 61 - 73.
19. Rogers EM (1962) Diffusion of Innovations (1st ed.): Free Press, New York, NY.
20. Rogers EM. (1983) Diffusion of Innovations (4th ed.): The Free Press, New York, NY
21. Safeena, R., Hundewale, N., & Kamani, A. (2011). Customer's Adoption of Mobile-Commerce. International Journal of e-Education, e-Business, e-Management and e-Learning , 1.
22. Saleem, Z., & Rashid, K. (2011, December). Relationship between Customer Satisfaction and Mobile Banking Adoption in Pakistan. *International Journal of Trade, Economics and Finance, 2*.
23. Wang, Y. S., Y. M. Wang, *et al.* (2003). "Determinants of user acceptance of Internet Banking: An empirical study." International Journal of Service Industry Management 14(5): 501-519.
24. Yu, T. K., & Fang, K. (2009). Measuring the post-adoption customer perception of mobile banking services. CyberPsychology and Behavior, 12(1), 33-35.
25. Zeithaml VA, Parasuraman A, Malhotra A (2002). Service quality delivery through Web sites: a critical review of extant knowledge. J. Acad. Mark. Sci. 30(4): 362-375.

REQUEST FOR FEEDBACK

Dear Readers

At the very outset, International Journal of Research in Commerce, Economics and Management (IJRCM) acknowledges & appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to request you to supply your critical comments and suggestions about the material published in this issue as well as on the journal as a whole, on our E-mail **info@ijrcm.org.in** for further improvements in the interest of research.

If you have any queries please feel free to contact us on our E-mail **infoijrcm@gmail.com**.

I am sure that your feedback and deliberations would make future issues better – a result of our joint effort.

Looking forward an appropriate consideration.

With sincere regards

Thanking you profoundly

Academically yours

Sd/-

Co-ordinator

ABOUT THE JOURNAL

In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived with this noble intention in view. This journal has been introduced to give an opportunity for expressing refined and innovative ideas in this field. It is our humble endeavour to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

Our Other Journals