

Constraints Hindering Adoption of E-Payments on Business Risk Management in Public Secondary Schools in Bomet County

¹SHADRACK KIPLANGAT KEMEI, ²DANIEL KAMAU KARABA,
³DR KEPHA OMBUI

¹student of Masters in Business Administration at Jomo Kenyatta University of Agriculture and Technology, Kenya

²adjunct Lecturer at Jomo Kenyatta University of Agriculture and Technology, Kenya

³lecturer at Jomo Kenyatta University of Agriculture and Technology, Kenya

Abstract: E-commerce, which is combination of traditional commerce and Internet, has brought dramatic changes of the way business transactions are conducted Kenya business environment and more also on transaction being conducted in Public school in the county. The focus of the study was to assess constraints hindering E-payments on business risk management in public secondary schools in Bomet County. This study was guided by the following research objectives: to determine the influence of ICT skills on business risk management; to establish the role of technology on business risk management; to assess influence of the cost of the system on the business risk management; to determine the moderating effects of the government policy on the business risk management. This study adopted a descriptive research design approach. The target population were 120 bursars and accountants in the public secondary schools in Bomet County. The data analysis involved descriptive statistics and the findings were summarized by use of tables and figures. Public secondary schools in Bomet county are faced by policy challenges due to insufficient laws, rules, regulations and management policies for successful implementation of electronic payment systems in schools. The study also indicated that the schools has faced challenges in patronizing the stakeholders to embrace the new electronic payment systems, In regard to strategies, the study showed that enhancing staff capabilities through training and attitudinal changes can be used as strategy for enhancing adoption of electronic payment systems. Secondly, implementing the electronic gadgets is too costly thus more emphases in reducing the cost. Thirdly increasing stakeholder's awareness through use of marketing campaigns and promotions can also be used as strategy of enhancing the adoption of electronic payment systems. On the contrary, the study lacked sufficient empirical evidence to indicate that offering differentiated pricing can be used as strategy to enhance the adoption of electronic payment systems. Finally, regression analysis showed a positive relationship between the volume of turnover and the need for enhanced staff capabilities; the need for enhanced differentiated pricing; and the need for enhanced convenience increases. The study recommends aligning of the process of the implementation of electronic payment systems to schools strategies to create synergy and maximize the benefits accrued from the process. Still, the study recommends establishment of clear policies, regulations and strategies both internally and government sponsored to address the challenges of security concerns, infrastructure, policy and lack of customer awareness in implementation and promotion of electronic payment systems in the private universities in Kenya.

Keywords: Contraints, E-Payment, Management.

1. INTRODUCTION

Background to the Study:

The rapid rise in the growth of E-payment technology throughout the world is a phenomenon that has been particularly remarkable among many economies, largely because of the e-payment model and ability to store and transfer cash. As a result, all classes of society now have access to financial services as people become increasingly familiar with E-payment-

money bill payment system. This concept of marketing being relatively new to most service industries in Kenya has made them to operate in a highly competitive and uneven marketplace characterized with consumers who are highly literate and financially e-transported (Milkau, 2010).

E-payment technology, viewed as a payment or service channel, has the potential to allow two important dimensions to be addressed at the same time: on the demand side, it represents an opportunity for financial inclusion among a population that is underserved by traditional services. On the supply side, it opens up possibilities for service industries to deliver a great diversity of services at low cost to a large clientele of the poorest sections of society and people living in remote areas, (Trim & Tanudjaja, 2013).

The enthusiasm about the potential of E-payment money remittance services for Africa's development is based on a view that if many western countries experienced the positive impact of science and technology during the industrial revolution, E-payment money remittance services would, on this basis, assist Africa to assail socio-economic problems (Macharia, 2013).

Lim, Lee and Kurnia (2007) defined electronic payment systems as any payment system that facilitates secure electronic commerce transactions between organisations or individuals. These include systems such as electronic cash, electronic cheques, smart cards and micropayment solutions such as PayPal. On the other hand, Lim (2008) saw the term electronic payment as any payment service that utilizes information communication technology such as cryptography and telecommunications networks or simply payments initiated, processed and received electronically.

Moertini, Athuri, Kemit and Saputro (2011) clasified e-payment systems into cash-like systems (e-cash), check-like systems (credit card and credit-debit based systems), and hybrid systems (stored-value card based systems). From barter trade where trade usually involved the exchange of goods and services by other goods and services to the invention of money as an abstract way of representing value, systems for making payments have continued to evolve. Asaolu, Ayoola and Akinkoye (2011) posit that in the course of time, new and increasingly abstract representations of value has arisen. They continue that the progress has seen barter, through bank notes, payment orders, cheques, credit cards culminate in electronic payment systems.

Further, Lim, *et al.* (2007) link the evolution of electronic payment systems to the commercialization of the Internet which have resulted in a dynamic business environment where transactions are able to take place without face to face interaction. They assert that, as the popularity of electronic commerce continues to increase, numerous payment systems have been created, attempting to make the process of exchanging money over the Internet easier for consumers.

According to Briggs and Brooks (2011), electronic payment system has not been without its share of challenges. They indicate lack of adequate legal backing, governance issues, credibility of the human element and lack of skilled resources, integrity of data transmitted, lack of infrastructures, interconnectivity and interoperability, attributable to the technological infrastructure and institutional capacity as some of these challenges.

The term operational risk is used to mean the risk of loss generated by the use of processes or systems. It may also mean inadequacy of human resources or failure to serve properly by human or external events and actions (Tanase and Serbu, 2010). Jarrow (2008) simply puts it as the risk of loss resulting from the inadequate or failed internal processes, people and systems or from external events, which include the legal risk. He explains that 'operational risk is partitioned into two. The risk of a loss due to the firm's operating technology/system, including failed internal processes and transactions, or the risk of a loss due to agency costs, including fraud and mismanagement' (Jarrow, 2008,). Hence, these two types of operational risks generate loss processes with completely different characteristics. One is based on the process/system, the other is based on incentives (Jarrow, 2008).

Tanase and Serbu (2010) posit that with intensification of operations for individuals and small traders, increased economic trade, the increased use of automated technologies, and the increased use of external sources and of sophisticated techniques for reducing the market risk have generated increasing operational risk. For example externally, e-payments have been linked to enhanced operational risks. Fernandes (2013) links e-payements to the birth of electronic frauds (e-frauds). This has resulted from extensive use of the internet technology in carrying out electronic business transactions across the globe. Fraud in this case refers to a 'deception deliberately practiced to secure unfair or unlawful gain where some part of the communication between the victim and the fraudster is via a computer network and/or some action of the victim and/or the fraudster is performed on the computer network' (Fernandes, 2013).

In outlining the trends in electronic money in Kenya, Mbuguah and Karume (2013) affirm that e-payment risks in the banking and telecommunication sectors include legal risks, credit risks, operational risks, systemic risks, reputation risks and liquidity challenges. the two studies did not look at the learning institutions.

Further, Magutu, *et al.* (2011) looked at the challenges faced and benefits that accrue from adoption and usage of e-commerce products and services by commercial banks in Kenya.

They highlighted the benefits of e-payments as improved customer service, reduced number of customers in the banking hall, reduced operating costs and increased market share. They also found out that the challenges faced in the adoption of ecommerce include compatibility with existing legacy systems, cost of implementation, security concerns, unreliable telecommunication as well as lack of legislation governing e-commerce transactions.

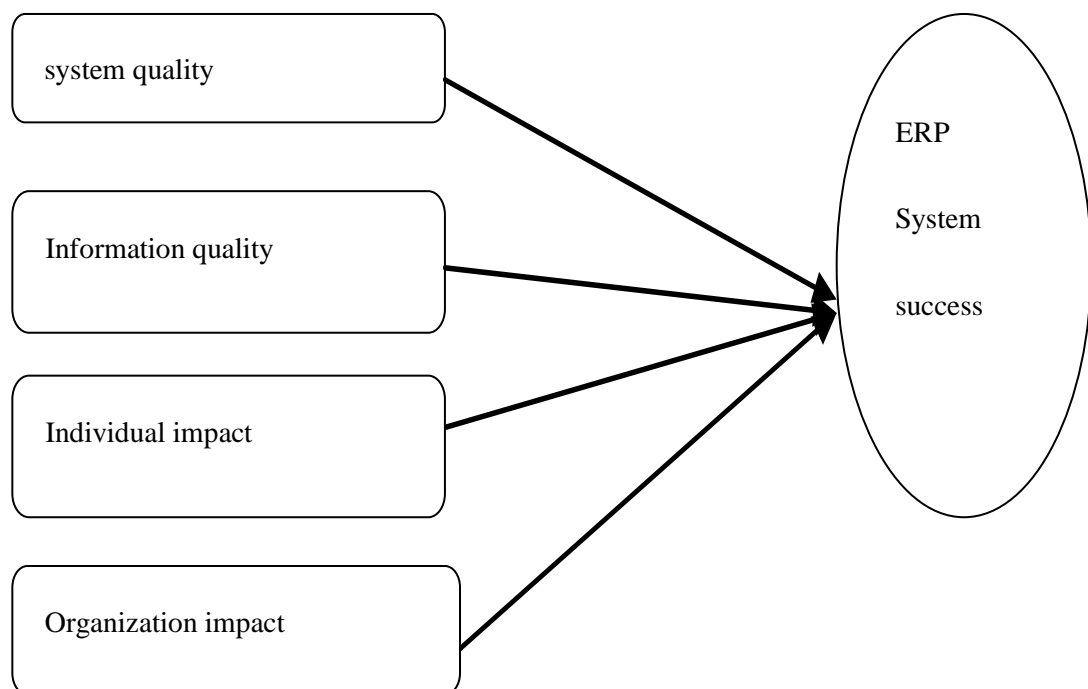
From the above literature done and presented on the success of E-payment system in different sector is of great achievement, Little or none has being mentioned on public secondary schools and especially in Bomet County that's operationation of risks that can be managed by e-payments; strategies for enhancing e-payments and the challenges that face organizations that adopt e-payment systemsHaving being adopted financial management issues will be past, therefore, there exists a need, for a substantive research on the constraints hindering e-payment on business risk management in public secondary schools in Bomet County.

2. LITERATURE REVIEW

Gable *et al.*'s., 2003 model:

Gable et al., 2003 were among the first authors to specify the dimensions of information systems success in an ERP context. They developed a model that redefined the model developed by Delone and McLean (2002) where they eliminated user and user satisfaction in their model. The dimensions retained are information quality, ERP system quality, individual impact and organization impact.

Both Delone and McLean's (2002) and Gable et al., 2003 have ignored the contextual influences Ifinedo, (2006). They recommended focusing information systems success and providing of information success external factors such as the organization structure. IFMIS Kenya is an accounting ERP system and hence qualify also be evaluated using the Gable et al., 2003 model. To consider factors such IFMIS system quality and information quality and other organization factors. However the model was used in the private organizations and not in the public sector.

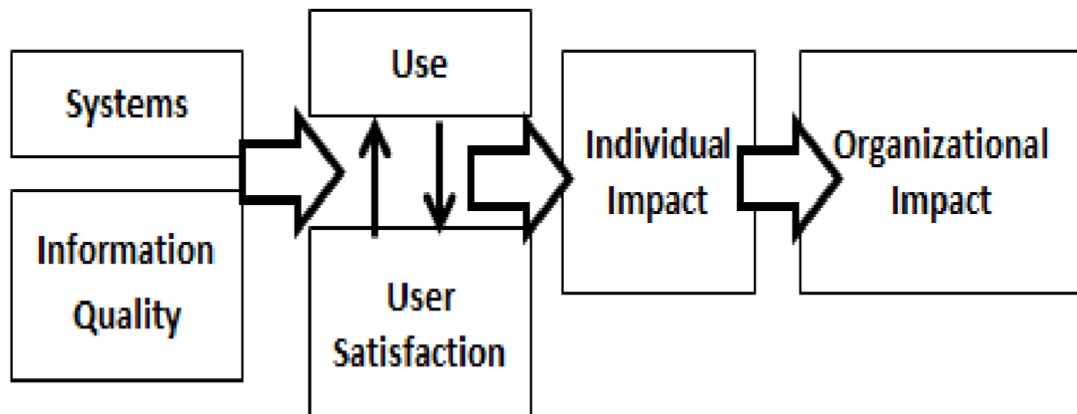


Gable *et al.*, (2003) ERP system success measurement model:

Delone and Mclean’s Model of IS Success:

The model is interpreted as follows: both system quality (technical quality) and information quality (output quality) affect both use and user satisfaction. Amount of use can affect user satisfaction and vice versa either positively or negatively. Use and user satisfaction are antecedent to individual impact which impact on organization impact. (Daoud and Triki, (2013 cited in Mushyat 2000 and Ismail 2009) in their literature review identified Delone and McLean’s model is used in accounting information systems. He went further and showed that this model is valid in one dimensional and can be applied in any accounting information systems context.

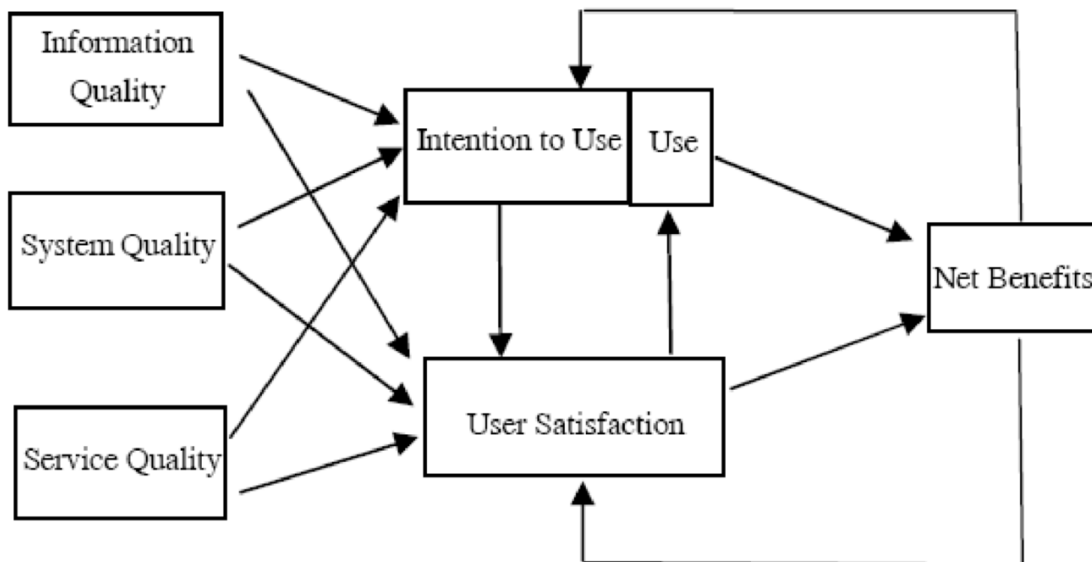
The D&M model of IS success has informed a number of previous studies such as Garrity & Sanders, 1998). The 1992 model has been criticized because of mixing the variances and processes models in one package.



Delone and Mclean’s Model of IS Success source: (Delone and Mclean, 1992: 87)

The Updated Delone and McLean’s 2003 Model:

The 1992 updated model was enhanced to support multi-dimensional aspects that are integrated an IS success. Delone and McLean updated there IS successful models to include another dependent variable known as service quality



The Updated Delone and McLean’s 2003 Model:

Many empirical studies done by the information researchers have supported the updated Delone and Mclean updated model .The same realized and encouraged the Government and Private Authorities to include measures for information quality, system quality, service quality, system use, user satisfaction and perceived net benefits in their techniques of information system success, Zaied (2012).

The Government and corporate organizations are investing heavily in e-commerce applications which are internet based platform but faced with a situation on how to evaluate their success. The updated IS success model has been adapted to come up with e-commerce IS success model Zaid (2012). IFMIS system is an online system and hence qualify to be an e-commerce application. A lot of information can be borrowed from this where the primary system users are external customers or suppliers or the government employees. They use the system to make buying or selling and execute business transactions. The decisions made will impact the individual users, organizations and even the economy at large. The only difference is that the system quality and information quality in the Delone and McLean model have been replaced by e-commerce and content respectively. User satisfaction is also replaced with customer e-commerce satisfaction.

System quality measures the desired characteristics of an e-commerce system such as usability, availability, reliability, adaptability and online response time. The content issue refers to the web content which should be completing, relevant easy to use and secure. In our proposed framework for IFMIS this can be IFMIS website. Service quality refers to the support given the service provider whether delivered by the IS unit, organization or outsourced from an internet provider. In our proposed framework this can be the ICT unit of IFMIS department at Treasury. Usage may refer to navigation to the site to look for information or executing a transaction. User satisfaction or customer e-commerce satisfaction refers to the customer experience through information retrieval, purchase, payment and other service available. Net benefit which capture the impacts of e-commerce on customers, suppliers, employees and organizations.

Technology Acceptance Model (TAM):

Technology Acceptance Model (TAM) is originally proposed by Davies in 1986. The theory models explained how users come to accept and use technology. The model suggests that when users of an information system are presented with a new technology a number of factors influence how and when they will use it notably the perceived usefulness and perceived ease of use (Kim et al., 2009).

Perceived usefulness which measures the degree to what a system enhances the job performance.

Perceived ease of use which measures the degree to which a user believes that by using the system would relieve him some effort. TAM is said to be a valid, robust model of user to predict user acceptance. Technology Acceptance Model demonstrates on how the information system is determined by the behavioral pattern intention and the behavioral pattern determined by person's attitude towards using the system. According to Davis the attitude of an individual is not only the factor that determines his use of a system but is also based on the impact on the performance. For example if a user who may be an employee does not welcome an information system the probability that he or she will use it is high if he or she perceives that it will improve his performance at work.

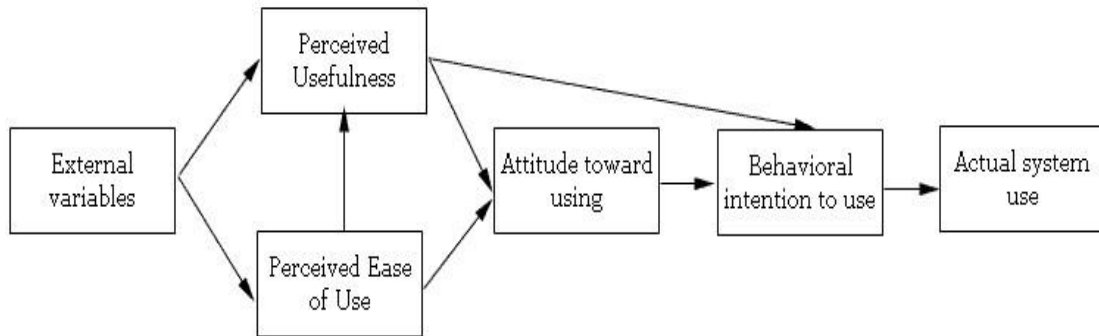
Davis (2001) illustrated that the technology acceptance model consisted of two independent components. These were the ease of use and perceived use and perceived usefulness. These two components determined the depended component which is the user's intention to use. Venkatesh (2003) noted that TAM was developed specifically to project acceptance of information technology and use in the workplace. The perceived usefulness refers to extent to which a user feels that the new technology or innovation will assist him or her in making his or her work more efficient and effective. Perceived ease of use determines the required effort that a user needs to apply when using the technology or innovation (Chuttur, 2009). Both perceived usefulness and perceived ease of use are affected by external factors. Venkatesh and Davis (2000) developed the model further by explaining what influences perceived usefulness and perceived ease of use. The new model included the factors that affect perceived usefulness and perceived ease of use (Moore, 2010).

The components that affect perceived usefulness included quality of output, subjective norms, relevance of the task and result demonstrability. Further, subjective norm is affected by experience and the capacity to volunteer. Consequently, image can be seen as essential to an individual feeling when they adopt a new type of technology (Feuerlicht, 2010).

Government policy on information technology has recently focused on establishing electronic systems which give administrators and employees online access to various learning materials and government publications. The move is informed by changes in demographic factors, service deliver market factors and innovation in technology (Geels, 2002). However, many challenges have to be overcome in the process of integration of technology that is instrumental to improving accounting operations. These challenges range from staff competencies, technology satisfaction, faculty effort and technology infrastructure (Surry, Ensminger & Haab, 2005).

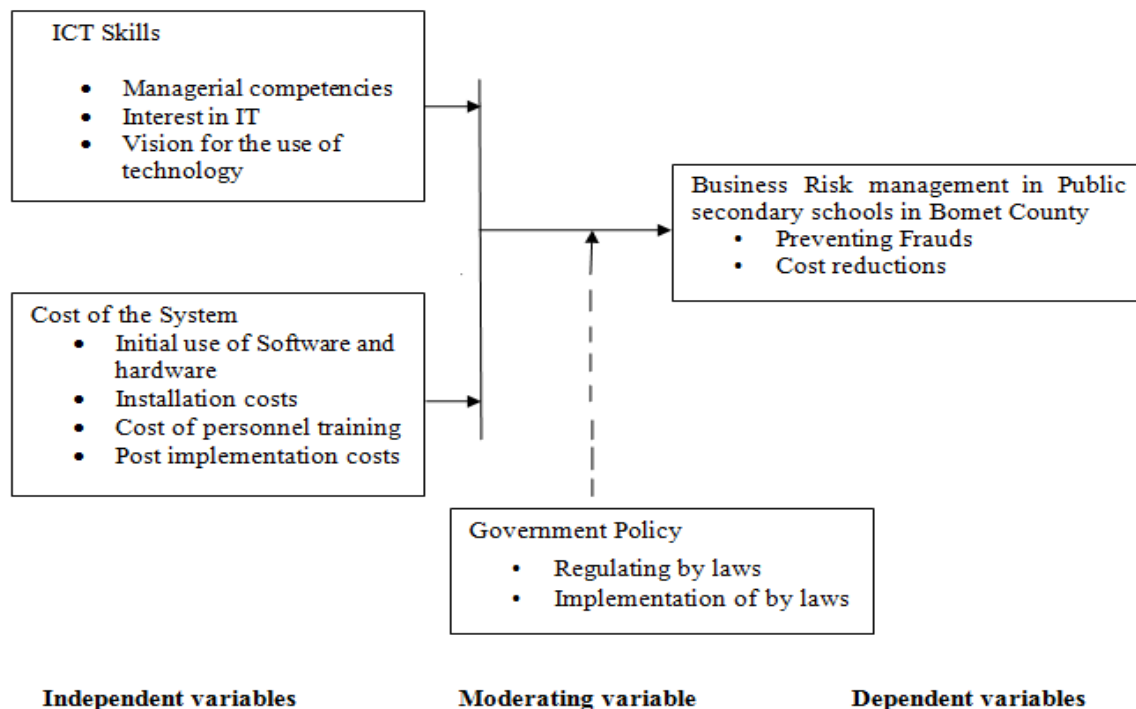
Many government institutions and especially in the county have failed in delivering services primarily due to poor decisions, high cost of technology, lack of a serious business strategy and competition (Elloumi, 2004). Most of the universities have been facing enormous difficulties in trying to implementing strategies, these including effectiveness, delivery, and acceptance of the courses (Saadé, 2003). Simply by replicating classroom experience online and offering any conceivable course cannot meet the students' requirements and may cause unexpected problem (Kilmurray, 2003).

Public satisfaction due to continuous frustration in web-based online remittances of taxes more so in sub-Saharan countries has gone down due to users' inability to make their payments. This theory is relevant for this research because it helped elaborate how perceived ease of use and perceived usefulness determine the intention to use and ultimately the usage behavior of Government departments and institutions.



Technology Acceptance Model version 1 Davis (2001)

Conceptual Framework



3. RESEARCH METHODOLOGY

Target Population:

The target population for a survey was the entire set of units for which the survey data was to be used to make inferences. Thus, the target population defines those units for which the findings of the survey were meant to generalize. Cooper and Emory (2005) define population as the total collection of elements about which the researcher wishes to make some inferences. An element is the subject on which the measurement is being taken and is the unit of the study. Target respondents were Bursar and Accounts clerks in 120 public secondary schools in Bomet County.

Data Analysis:

According to Bryman and Bell (2003) data analysis refers to a technique used to make inferences from data collected by means of a systematic and objective identification of specific characteristics. Both descriptive and inferential statistics was adopted for the study. The quantitative data was analyzed by using descriptive statistics which included frequency distribution tables and measures of central tendency (the mean), measures of variability (standard deviation) and measures of relative frequencies. The inferential statistics included a regression model which established the relationship between variables. Data was analyzed by the use of a statistical software SPSS version 21.

To determine constraints hindering adaption of e-payment on business risk management in public secondary schools in Bomet county, the study adopted the linear regression model and Pearson correlation. The Pearson correlation tested the strength of the relationship while the regression analysis established the form of relationship between the independent and dependent variable. The regression took the following form:

$$Y = \beta_0 + \beta_1 \chi_1 + \beta_2 \chi_2 + \beta_3 \chi_3 + \beta_4 \chi_4 + \epsilon$$

Where: Y = BRM on public secondary schools

χ_1 = ICT Skills

χ_2 = Technology

χ_3 = Cost of the system

χ_4 = Government policy

β_0 = the constant

β_{1-n} = the regression coefficient or change included in Y by each χ

ϵ = error term

4. DATA ANALYSIS, PRESENTATION AND INTERPRETATION

Introduction:

This chapter presents the results and analysis of the data collected from public secondary schools on Bomet County on the constraints hindering adoption of e-payments on business risk. The findings were presented in the form of frequency tables, graphs, and pie charts. The first section presents the general information including respondent’s background information. The proceeding section presents the influence of ICT skills on business risk management in public secondary schools in Bomet County, the role of technology on Business risk management in Public schools in Bomet County, the influence of the cost of the system on business risk management in Public schools in Bomet County, and the moderating effect of Government policy on business risk management in Public schools in Bomet County. The target population for the study included both the bursar and accounts clerk in 120 public secondary schools in Bomet County.

The researcher distributed a total of 30 questionnaires to the respondents and received all of them back giving a response rate of 100%. This response rate was good enough and representative and conforms to Mugenda and Mugenda (2003) where it states that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good enough, and a response rate of 70% and over is excellent.

Presence of E-payments:

The study further sought to establish if the schools had e-payment systems in their operation. The response was presented in table below

Presence of E-payments:

Table 4.1

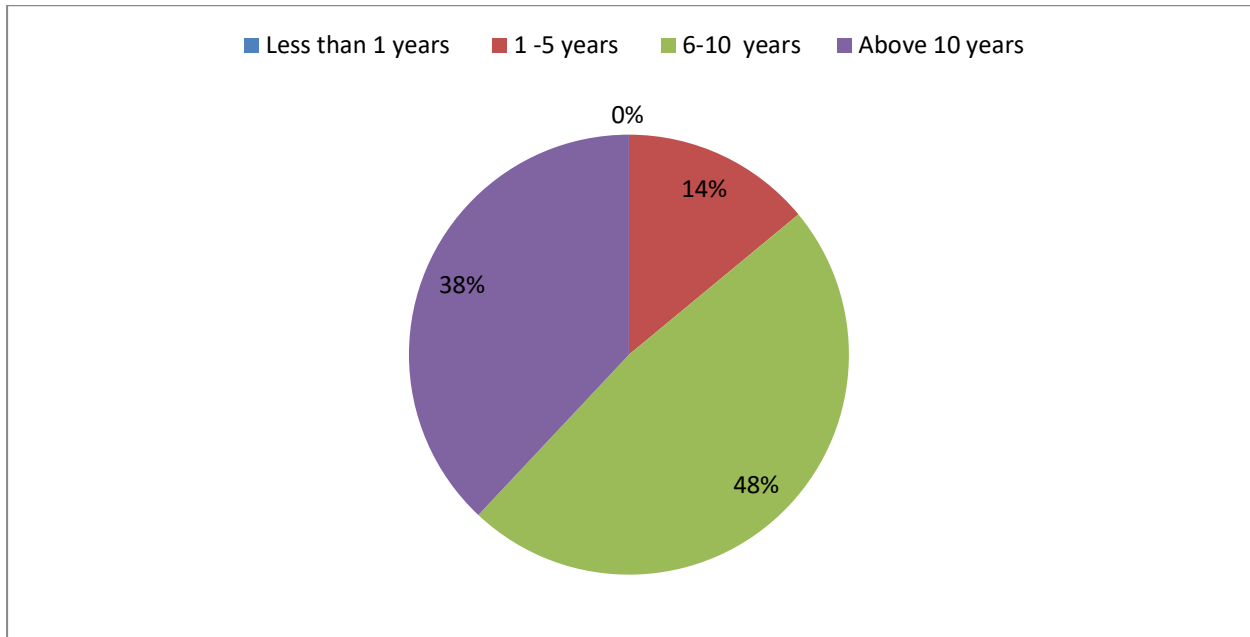
E-payment systems	Frequency	Percentage
Mobile phone based	13	45
Internet based Credit/debit cards	6	16
E-banking	11	39
Total	30	100

The study found that the most common form of e-payment was the mobile phone where all the schools had pay bill numbers from the telecommunication companies in Kenya such as Safaricom which they used to collect fees from parents at 45%. Apart from the mobile phones were the e-banking method where most parents just makes deposit of fees into the schools accounts and only submits their receipts to school at 39%. Finally internet/credit card were also used at a response rate of 16%.

Duration of Using E-payment:

Finally under this section, the researcher asked the respondents to indicate the number of years they have been using e-payment methods in their schools. Their response was presented in figure 4.5:

Duration of Using E-payment:



The study found that most of the respondents had been using their e-payment systems for 6-10 years at a response rate of 44%. They were followed by those who indicated that they have been using e-payments for over ten years are 38% then those who have been using them for 1-5 years were rated at 14%.

Regression Analysis:

The multiple regression model given below was applied to establish relationship between the independent variables and dependent variable:

$$Y = \beta_0 + \beta_1 \chi_1 + \beta_2 \chi_2 + \beta_3 \chi_3 + \beta_4 \chi_4 + \epsilon$$

Where;

(Y) - is the value of the dependent variable (BRM on public secondary schools)

β_0 - is a constant, $\beta_1 - \beta_4$ are the coefficients of the independent variables measuring the strength of the relationship between the independent variables and the dependent variable

X_1 - ICT Skills, X_2 - Technology, X_3 - Cost of the system, X_4 - Government policy

ϵ - Standard error.

Table 4.2: Model summary

Model	R	R square	Adjusted R square	Std. Error of the Estimate
1	.860 ^a	.777	.443	4.34007

a. Predictors: ICT Skills, Technology, Cost of the system, Government policy

The R column represents the value of *R*, the *multiple correlation coefficient* at 0.860, which indicates a good level of prediction (strong correlation because it is close to 1). The "R Square" column represents the R^2 value i.e the coefficient of determination which is the proportion of variance in the dependent variable that can be explained by the independent variables (0.777). Thus the independent variables explain/account for 77.7% of the variability of the dependent variable, ICT Skills, Technology, Cost of the system, Government policy account for 77.7% of BRM on public secondary schools in Bomet County. The difference of 22.3% (from 100%) is accounted by other factors in the schools which were beyond the scope of this study.

Statistical significance:

The *F*-ratio in the ANOVA table tests whether the overall regression model is a good fit for the data. An *F* statistic is a value one gets when he runs an ANOVA test or a regression analysis to find out if the means between two populations are significantly different. An *F* test will tell you if a group of variables are jointly significant. In the *F* test results, there are have both an *F* value and an *F* critical value. The *F* critical value is the *F* statistic. In general, if the calculated *F* statistic in a test is larger than your table *F* value, you can reject the null hypothesis. In this case, the *F* calculated is 7.375 while the *F* critical is 4. 95 which implies that the model is statistically significant for the study.

The *F* statistic is used in combination with the *p* value when deciding if the overall results are significant. This is because if there is a significant *F* statistic, it doesn't mean that all the variables are significant. The statistic is just comparing the joint effect of all the variables together. The table shows that the independent variables statistically significantly predict the dependent variable, $F = 4. 95, p < 0.000$ i.e., the regression model is a good fit of the data. In other words the data reflects the findings of this study.

Table 4.3: Anova

Model	Sum of squares	df	Mean square	F	Sig.
1 Regression	4196.483	5	1049.121	4.95	.000 ^b
Residual	3076.778	71	32.387		
Total	7273.261	76			

a. Dependent variable; BRM on public secondary schools in Bomet County

b. Predictors: ICT Skills, Technology, Cost of the system, Government policy

F calculated:

F calculated was found using the model below.

$$F \text{ Calculate} = \frac{(n_1 - 1) s_1^2 + (n_2 - 1) s_2^2 + (n_3 - 1) s_3^2 + (n_4 - 1) s_4^2}{N - g}$$

n = number of measurements in group

S = sum of squared deviations from the mean in each group

N = total number of measurements

G = total number of groups

$$F \text{ calculated} = \frac{(30 - 1)(7.33) + (30 - 1)(7.33) + (30 - 1)(10.83) + (30 - 1)(3)}{30 - 4}$$

F calculated = 7.375

Estimated model coefficients:

The general form of the equation to predict BRM on public secondary schools in Bomet County from ICT skills, tsechnology, cost of the system, Government policy is: holding these factors constant (independent variables), BRM on public secondary schools in Bomet County is predicted at 0.830 whereas ICT skills improves BRM on public secondary schools in Bomet County by 0.465, technology improves BRM on public secondary schools in Bomet County by 0.385,

cost of the system improves BRM on public secondary schools in Bomet County by 0.218 and Government policy improve BRM on public secondary schools in Bomet County by 0.506. This is presented as shown below.

Table 4.4: Regression Coefficients

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	β	Std. Error	Beta		
1 Constant	0.830	6.385	-	13.756	0.000
Comnsty	0.465	0.063	0.176	2.633	0.010
Stkpart	0.385	0.043	0.677	8.871	0.000
Resoumnt	0.218	0.032	0.252	3.667	0.000
Planning	0.506	1.344	0.748	9.824	0.000
a. Dependent variable; Clearing System Upgrade Projects					
b. Predictors: Communication System, Stakeholder Participation, Resource Management, Planning					

Unstandardized coefficients indicate how much the dependent variable varies with an independent variable when all other independent variables are held constant. The unstandardized coefficient, B_1 for communication systems is equal to 0.465. This means that for each BRM on public secondary schools, there is an improvement of 0.465 on the e-payments systems.

Thus the model can be translated as:

$$Y = 87.83 + 2.165X_1 + 4.385X_2 + 1.118X_3 + 13.208X_4 + \epsilon$$

Statistical significance of the independent variables:

You can test for the statistical significance of each of the independent variables. This tests whether the unstandardized (or standardized) coefficients are equal to 0 (zero) in the population. If $p < .05$, you can conclude that the coefficients are statistically significantly different to 0 (zero). The t -value and corresponding p -value are located in the t and $sig.$ columns, respectively and measures 0.000. Which means that the multiple regression variables are statistically significant at $F(4, 95) = 32.393, p < .0005, R^2 = .577$. All four variables added statistically significantly to the prediction at $p < 0.000$.

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

Introduction:

This chapter finalizes the study on constraints hindering adoption of e-payments on business risk management in public secondary schools in Bomet County, Kenya. The study was carried out using descriptive study of the public secondary schools in Bomet County. The target population was 120 schools were the bursar and the accounts were sampled to participate in the study from each school. This gave a sample size of 30 respondents. The findings were presented in the following order.

Summary of Findings:

Thus the independent variables explain/account for 77.7% of the variability of the dependent variable, ICT Skills, Technology, Cost of the system, Government policy account for 77.7% of BRM on public secondary schools in Bomet County. The table shows that the independent variables statistically significantly predict the dependent variable, $F = 4.95, p < 0.000$ i.e., the regression model is a good fit of the data. In other words the data reflects the findings of this study. The general form of the equation to predict BRM on public secondary schools in Bomet County from ICT skills, tsechnology, cost of the system, Government policy is: holding these factors constant (independent variables), BRM on public secondary schools in Bomet County is predicted at 0.830 whereas ICT skills improves BRM on public secondary schools in Bomet County by 0.465, technology improves BRM on public secondary schools in Bomet County by 0.385, cost of the system improves BRM on public secondary schools in Bomet County by 0.218 and Government policy improve BRM on public secondary schools in Bomet County by 0.506.

Unstandardized coefficients indicate how much the dependent variable varies with an independent variable when all other independent variables are held constant. The unstandardized coefficient, B_1 for communication systems is equal to 0.465. This means that for each BRM on public secondary schools, there is an improvement of 0.465 on the e-payments systems.

Conclusions:

Thus the independent variables explain/account for of the variability of the dependent variable, ICT Skills, Technology, Cost of the system, Government policy account for of BRM on public secondary schools in Bomet County. The table shows that the independent variables statistically significantly predict the dependent variable i.e., the regression model is a good fit of the data. In other words the data reflects the findings of this study. The general form of the equation to predict BRM on public secondary schools in Bomet County from ICT skills, tsechnology, cost of the system, Government policy is: holding these factors constant (independent variables), BRM on public secondary schools in Bomet County is predicted at 0.830 whereas ICT skills improves BRM on public secondary schools in Bomet County, technology improves BRM on public secondary schools in Bomet County, cost of the system improves BRM on public secondary schools in Bomet County and Government policy improve BRM on public secondary schools in Bomet County. You can test for the statistical significance of each of the independent variables. This tests whether the unstandardized (or standardized) coefficients are equal to 0 (zero) in the population., you can conclude that the coefficients are statistically significantly different to 0 (zero). The *t*-value and corresponding *p*-value are located in the *t* and sig. columns, respectively and measures. Which means that the multiple regression variables are statistically significant. All four variables added statistically significantly to the prediction.

Recommendations:

On use and implementations of E-Payment Systems:

Electronic payment systems can be used in public schools in Kenya to reduce misappropriation of funds and reduce risk of external criminal activities. Thus recommends aligning of the process of the implementation of electronic payment systems to the organizations strategies to create synergy and maximize the benefits accrued from the process.

The challenges of Implementing E-payment Systems:

The study recommends establishment of clear policies, regulations and strategies both internally and government sponsored to address the challenges of security concerns, infrastructure, policy and the school stakeholders awareness in implementing and promotion of electronic payment systems.

Strategies for Enhancing Adoption of Electronic Payment Systems:

Electronic payments are emerging in the county and constantly evolving in the business environment and more emphases to be dealt more in public schools in the county, there is need to continuously review their staff training practices, promotional activities, technologies and strategies on e-payments as this would lead to efficiency of their systems and eliminate the unnecessary documentation that transactions cumbersome.

Recommendations for Further Studies:

The current study focused only on the public schools in Bomet. A study on other counties would be welcome to broaden the scope. Similarly a study on use of other technology innovation in public school is welcomed.

REFERENCES

- [1] Abrazhevich, D. (2004). Electronic payment systems: a user-uentered perspective and interaction design. Eindhoven, NL: Universiteitsdrukkerij Technische Universiteit Eindhoven.
- [2] Abubakar, F. M. & Ahmad, H. B. (2013). The Moderating Effect of Technology Awareness on the Relationship between UTAUT Constructs and Behavioural Intention to Use Technology: A Conceptual Paper. Australian Journal of Business and Management Research, 3(2), 14-23.
- [3] Alshehri, M. & Drew, S. (2010). Challenges of e-Government Services Adoption in Saudi Arabia from an e-Ready Citizen Perspective. World Academy of Science, Engineering and Technology, 66, 1-6.
- [4] Anyanwu, A. C., Ezugwu, A. E. & Abdullahi, S. E. (2012). Electronic Payment System (EPS): Facilitating the Development and Adoption in Nigeria. International Journal of Computer Science Issues, 9(2), 462-467.
- [5] Asaolu, T. O., Ayoola, T. J. & Akinkoye, E. Y. (2011). Electronic payment systems in Nigeria: implementations, constraints and solutions. Journal of Management and Society, 1(2), 16-21.
- [6] Aurhur, S. & Sheffrin, M. (2003). Economics: Principles in Action. Upper Saddle River, NJ: Pearson Prentice Hall.

- [7] Bolt, W. (2012). Retail Payment Systems: Competition, Innovation, and Implications. DNB Working Paper, 362, 1-22.
- [8] Briggs, A. & Brooks, L. (2011). Electronic payment systems developed in developing countries: the role of institutional arrangements. *Electronic Journal on Information Systems in Developing Countries*, 49(3), 1-16.
- [9] Burns, N. & Grove, S. (2003). *Understanding nursing research* (3rd ed.). Philadelphia, PA: W.B. Saunders Company.
- [10] Chalupka, R. & Teplý, P. (2008). Operational Risk Management and Implications for Bank's Economic Capital-A case Study. *Institute of Economic Studies Working Paper: 17/2008*, 1-32.
- [11] Chavan, J. (2013). Internet banking-benefits and challenges in emerging economy. *International Journal of Research in Business Management*, 1(1), 19-26.
- [12] Commission for University Education. (2014). Status of universities. Retrieved October 10, 2014, from Commission for University Education: <http://www.cue.or.ke/services/accreditation/status-of-universities>
- [13] Commission for University Education. (2014). Universities standards and regulations.
- [14] University Standards for Accreditation and Operations. Nairobi, Kenya:
- [15] Commission for University Education.
- [16] Contardi, J., Evans, D. S., Gajda, B., Kitzman, T., Litan, R., Namburi, U. & Schmalensee, R. (2011). Managing the Risks and Security Threats of Mobile Payments. *Lydian Journal*, 2, 1-9.
- [17] Cooper, D. R. & Schindler, G. J. (2008). *Business Research Methods* (9th ed.). New York, NY: McGraw Hill.
- [18] Crimes, T. (2013). National Payments Plan: A Strategic Direction for Payments. Dublin, IE: Central Bank of Ireland.
- [19] Elbadrawy, R. & Aziz, R. A. (2011). Resistance to mobile banking adoption in Egypt: A cultural perspective. *International Journal of Managing Information Technology*, 3(4), 9-21.
- [20] Evans, A. (2014). Key Person Dependencies: Ensuring Loss of Resources does not Equal Loss of Knowledge. Retrieved October 26, 2014, from http://www.morganfranklin.com/shield_KPD.
- [21] Fernandes, L. (2013). Fraud in electronic transactions: threats and counter measures. *Asia Pacific Journal of Marketing & Management Review*, 2(3), 23-32.
- [22] Financial Sector Regulatory Forum. (2014). Kenya Financial Sector Stability Report, 2013. Annual Review, Nairobi, Kenya.
- [23] Garson. (2012). *Sampling*. Raleigh, NC: Statistical Associates Publishing.
- [24] Ghauri, P. & Grönhaug, K. (2005). *Research Methods in Business Studies*. New York, NY: Pearson Education.
- [25] Gikandi, J. & Bloor, C. (2010). Adoption and effectiveness of electronic banking in Kenya. *Elect. Commerce Res. Applications*, 9(4), 277-282.
- [26] Hamdi, H. (2011). Can E-Payment Systems Revolutionize Finance of the Less Developed Countries? The Case of Mobile Payment Technology. *International Journal of Economics and Financial Issues*, 1(2), 46-53.
- [27] Hamid, N. R. & Cheng, A. W. (2013). A risk perception analysis on the use of electronic payment systems by young adult. *WSEAS Transactions on Information Science and Applications*, 1(10), 26-35.
- [28] Harris, L. & Brown, G. (2010). Mixing Interview and Questionnaire Methods: Practical Problem in Aligning Data. *Practical Assessment, Research and Evaluation*, 15(1), 1-19.
- [29] Hataiseree, R. & Banchuen, W. (2010). The Effects of E-payment Instruments on Cash
- [30] Usage: Thailand's Recent Evidence and Policy Implications. Working Paper. Bank of Thailand, Payment Systems Department, 01, 1-35.
- [31] Humphrey, D., Willeson, M., Lindblom, T. & Bergendahl, G. (2013). What does it Cost to Make a Payment? *Review of Network Economics*, 2(2), 159-174.

- [32] Hyytinen, A. & Takalo, T. (2008). Consumer awareness and the use of payment media:evidence from young Finnish consumers. Bank of Finland Research Discussion Papers, 2, 1-33.
- [33] Hyytinen, A. & Takalo, T. (2009b). Consumer awareness and the use of payment media: Evidence from young Finnish consumers. Review of Network Economics, 8, 164188.
- [34] Issahaku, H. (2012). Challenges of Electronic Payment Systems in Ghana: The Case of eZWICH. American Journal of Business and Management, 1(3), 87-95.
- [35] Jack, W. & Suri, T. (2010). Economics of Mpesa. Nairobi, KE: Central Bank of Kenya.
- [36] Jack, W. & Suri, T. (2010). The Economics of M-PESA. Nairobi, KE: Central Bank of Kenya.
- [37] Jarrow, R. A. (2008). Operational Risk. Journal of Banking & Finance, 32, 870-879.
- [38] Kieso, D. E. Weygandt, J. J., & Warfield, T. D. (2010). Intermediate Accounting (IFRS Edition ed., Vol. 2). New York,NY: John Wiley & Sons.
- [39] Kinuthia, J. N. & Akinnusi, D. M. (2014). The magnitude of barriers facing e-commerce businesses in Kenya. Journal of Internet and Information Systems, 4(1), 12-27.
- [40] Kombo, K. D. & Tromp, A. L. (2006). Thesis Writing: An Introduction. Nairobi, KE: Pauline's Publishing.
- [41] Kumaga, D. (2010). The challenges of implementing Electronic Payment Systems-The
- [42] Case of Ghana's E-zwich Payment System. Master's Thesis in Business
- [43] Administration, School of Management- Blekinge Tekniska Hogskola. Blekinge, Sweden, Sweden: Business Administration, School of Management- Blekinge Tekniska Hogskola.
- [44] Lim, S. V. (2008). The development of e-payment systems and challenges for central banks in the SEACEN countries. Kuala Lumpur, MY: The South East Asian Central Banks (SEACEN).
- [45] Lim, B., Lee, H. & Kurnia, S. (2007). Exploring the Reasons for a Failure of Electronic Payment Systems: A Case Study of an Australian Company. Journal of Research and Practice in Information Technology, 39(4), 231-243.
- [46] Magutu, P. Mwangi, M., Nyaoga, R., Ondimu, G., Kagu, M., Mutai, K., . . . Nthenya, P. (2011). E-commerce products and services in the banking industry: the adoption and usage in commercial banks in Kenya. Journal of Electronic Banking Systems, 1-19.
- [47] Mbogo, M. (2010). The impact of mobile payments on the success and growth of microbusiness: the case of m-pesa in Kenya. The Journal of Language, Technology & Entrepreneurship in Africa, 2(1), 182-203.
- [48] Mbuguah, S. & Karume, S. (2013). Trends in electronic money transfer in Kenya.
- [49] Journal of Emerging Trends in Computing and Information Sciences, 4(1), 69-78.
- [50] Moertini, S. V., Athuri, A. A., Kemit, H. M. & Saputro, N. (2011). The development of electronic payment systems for universities in Indonesia:on resolving key success factors. International Journal of Computer Science & Information Technology, 3(2), 16-33.
- [51] Mohammad, A. (2008). The Development of E-payments and Challenges in Malasya. In
- [52] V. Lim Choon Seng, The Development of E-Payments and Challenges for Central Banks in the SEACEN Countries (pp. 123-157). Kuala Lumpur, Malasya: The South East Asian Central Banks Research and Training Centre.
- [53] Mutua, J., Oteyo, I. N. & Njeru, A. W. (2013). The extent of e-commerce adoption among small and medium enterprises in Nairobi, Kenya. International Journal of Business and Social Science, 4(9), 116-122.
- [54] Ngereza, K. A. & Iravo, A. M. (2013). Challenges influencing implementation of electronic payment systems: a case study of Kenya Airways Company.
- [55] International Journal of Social Sciences and Entrepreneurship, 1(3), 509-520.
- [56] Nkwe, N. (2012). E-Government: Challenges and Opportunities in Botswana. International Journal of Humanities and Social Science, 2(17), 39-48.

- [57] Ogedebe, P. M. & Jacob, B. (2012). E-Payment: Prospects and Challenges in Nigerian Public Sector. *International Journal of Modern Engineering Research*, 2(5), 31043106.
- [58] Organization for Economic Co-Operation and Development [OECD]. (2006). *Online payment systems for e-commerce*. Paris, Italy: Organization for Economic CoOperation and Development [OECD].
- [59] Padmanabhan, G. (2011, November 26th). Payment system issues and challenges. Speech by Mr G Padmanabhan, Executive Director of the Reserve Bank of India, at the Foundation Day – Catholic Syrian Bank. BIS central bankers.
- [60] Panigrahi, A. K. (2013). Liquidity Management of Indian Cement Companies – A Comparative Study. *Journal of Business and Management*, 14(5), 49-61.
- [61] Papaefstathiou, I. & Manifavas, C. (2004). Evaluation of micro payment transaction cost. *Journal of Electronic Commerce Research*, 5(2), 99-113.
- [62] Rachna & Singh, P. (2013). Issues and Challenges of Electronic Payment Systems.
- [63] *International Journal for Research in Management and Pharmacy*, 2(9), 25-30.
- [64] Raja, J., Velmurgan, M. S. & Seetharaman, A. (2008). E-payments: Problems and Prospects. *Journal of Internet Banking and Commerce*, 13(1), 1-17.
- [65] Smith, S. M. & Albaum, G. S. (2012). *Basic Marketing Research: Handbook for Research Professionals (Vol. 1)*. (M. Rutter, Ed.) Provo, UT: Qualtrics Labs, Inc.
- [66] Srivatsava, A. K. & Ayora, J. (2012). Managerial Implication of Cyber Banking Bottlenecks in the "e" Era. *A Refereed Quarterly Journal*, 4(1), 72-77.
- [67] Sundstrom, J. (2006). *Adoption of Electronic Invoicing in SMEs*. A Masters Thesis, Department of Business Administration and Social Sciences; Lulea University of Technology. Lulea, Sweden.
- [68] Tadesse, W. & Kidan, T. S. (2005, October). E-payment; Challenges and opportunities in Ethiopia. Retrieved August 24, 2014, from
- [69] <http://www.uneca.org/itca/openafrica/resources/ePaymentStudyReportFinal2.pdf>
- [70] Tanase, R. D. & Serbu, R. (2010). Operational risk and e-banking. *Bulletin of the Transilvania University of Braşov*, 3(52), 327-334.
- [71] University of Tasmania. (2004). *Risk management toolkit: Operational*. Sydney, AU: University of Tasmania.
- [72] Uwonda, G., Okello, N. & Okello, N. G. (2013). Cash flow management utilization by Small Medium Enterprises (SMEs) in Northern Uganda. *Merit Research Journal of Accounting, Auditing, Economics and Finance*, 1(5), 067-080.
- [73] Worku, G. (2010). Electronic Banking in Ethiopia – Practices, Opportunities and Challenges. *Journal of Internet Banking & Commerce*, 12(2), 1-8.
- [74] World Bank. (2014). *The Opportunities of Digitizing Payments*. Washington, WA: World Bank.
- [75] Yaqub, J. O., Bello, H. T., Adenuga, I. A. & Ogundeji, M. O. (2013). The Cashless Policy in Nigeria: Prospects and Challenges. *International Journal of Humanities and Social Science*, 3(3), 200-212.