

# Adapting Information Technology to Boost Sustainable Entrepreneurship through Handy Banking Habits

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**Abstract**— This article reports the work done after exploring the challenges faced by both the Small and Medium Enterprises (SMEs) and the banking industry in the management of finances; especially the payment of utility bills and suggests an e-framework that can enhance banking experience for SMEs in Nairobi-Kenya as well as enhance financial gain for the banks. With the advent of newer and innovative computer based technologies such as agent banking, mobile banking and internet banking over the last decade; e-finance generally has become more of a reality than a dream as most financial institutions have moved with encouraging speed to embrace this innovation. Further, this technological revolution has increased access to personal information that potential lenders would normally rely on in granting credit to their customers as well as provision of a unique platform for the management of the SME subsector. The specific objectives of the study were to: Examine the potential benefits brought about by ICT as an interface for SME – bank interaction; Assess the role of steadfastness in financial management in instilling financial discipline in SMEs; Explore the willingness of financial institutions in implementing unique SME solutions; Develop an e-framework through which SMEs can channel their daily earnings to enhance financial management; Suggest the integration mechanisms of the e-framework to existing financial systems. Survey research design was used and a population of 10 banks and 100 SMEs formed the sampling frame. The sample for the study consisted of 5 banks and 30 SMEs selected using random sampling. Primary data was collected using questionnaire and direct interviews. Secondary data was collected from reports of past research. The questionnaires were pilot tested for validity and reliability. Quantitative data was analysed using descriptive statistics and presented using tables and percentages. Qualitative data was derived from reading the responses of the hypothetical questions and placed in categories fitting the research questions. The findings of this research established that SMEs do indeed face challenges in managing their finances and would greatly welcome a bank-led solution to overcome these challenges. From these findings, it is recommended that banks and the micro-finance industry work

together to develop appropriate information technology that will help ease the burden of managing their revenue and expenditure.

**Keywords**- *Information technology, sustainable entrepreneurship, banking sector.*

## I. INTRODUCTION

The role of entrepreneurship in economic development in all sectors of the economy cannot be over-emphasized all over the world [1]. However, in her work, "Influence of Managerial Skills on SME's on the Success and Growth of Small and Medium Enterprises in Kenya", Marion Mbogo [3] opines that most small and medium businesses fail within their first three years. As reported in [2], the Information and Communication Technology (ICT) has been the missing link to overcome the challenges faced by SMEs. In this report, the ICT sector has been one of the key contributors to the impressive growth performance in Africa over the last decade. Therefore to sustain this growth momentum, it is imperative that African governments, besides fostering peace and stability, create an environment that would be conducive to the growth and development of ICT entrepreneurs and nurturing young talents similar to the Silicon Valleys in India, United States, Israel and other countries. By recognizing this economic potential, the governments would be assisting in increasing competitiveness through streamlined administrative procedures, easier access to capital and enhanced capacity to participate in ICT-related projects.

In this recognition, the Kenyan government through the vision 2030 blueprint [3] has put in place elaborate measures to facilitate economic growth via SMEs. According to the blueprint, Kenya's micro, small and medium businesses are the base of entrepreneurial development and the 'seed bed' for inculcating an entrepreneurial culture and supporting rural industrialization. Further, the innovative document recognizes the crucial role of micro, small and medium businesses in industrial development and emphasizes the development of industrial parks in five towns – Kisumu, Mombasa, Eldoret, Nakuru and Nairobi – to spur industrial growth. It further proposes the development of two special economic zones in Kisumu and Mombasa.

With this framework in place, there is an increased role of financial institutions in harnessing economic growth. Financial institutions dedicated to funding small and medium enterprises through loans or equity capital are set to play an important role in financing Kenyan entrepreneurs facing high interest rates from commercial banks in 2012. This is

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according to a study by Winifred Ambunya [4]. In their global study on e-finance and its role in enhancing the operations and competitiveness of SMEs in meeting their financial obligations, the United Nations in 2001 reported on the potential benefits that internet-based financial transactions can have over traditional methods.

### A. Statement of the problem

Mr Anthony Wanjohi, a key speaker in a recent workshop on SMEs at KICC in Nairobi, noted that Lack of Managerial Training and Experience, Inadequate Education and Skills, Lack of Credit, National Policy and Regulatory Environment, Technological Change, Poor Infrastructure and Scanty Markets information have been cited as the key challenges facing SMEs in Kenya [5]. These have affected their growth and profitability and hence, diminish their ability to contribute effectively to sustainable development.

Many financial institutions in Kenya have discovered the need to step in and bridge this widening gap between SMEs and the ease of access to financial services [6]. However, lack of a proper, convenient and affordable medium of interaction still remains the bottleneck in these endeavors. According to separate reports by Micro-Finance Africa and Financial Sector Deepening (FSD) programme (K), key advances in ICT, have mitigated this challenge as ICT has infiltrated the lives and operations of many SMEs in Kenya and beyond [7],[8].

Although many Kenyan financial institutions have realized the existence of this gap, few have acted and none has developed a solution for problems that face SMEs on a daily basis. We believe by harnessing the power of ICT, financial institutions can develop products that would enable SMEs manage their daily revenue and expenditure.

### B. Main objective

To adapt information technology to boost sustainable entrepreneurship through handy banking habits

#### 1. Specific objectives

1. Examine the potential benefits brought about by ICT as an interface for SME – bank interaction
2. Assess the role of steadfastness in financial management in instilling financial discipline in SMEs
3. Explore the willingness of financial institutions in implementing unique SME solutions
4. Develop an e-framework through which SMEs can channel their daily earnings to enhance financial management
5. Suggest the integration mechanisms of the e-framework to existing financial systems

#### 2. Research questions

1. What medium can enhance interaction between SME's and Banks?

2. What level of steadfastness in financial can harness access to financial facilities for SME's
3. What is the level of willingness by banks in implementing ICT solutions that directly target SMEs?
4. Can ICT help in reducing banking costs for both SME's and banks
5. Can an e-framework form the requisite bridge to achieve the desired benefits?

### C. Scope of the study

This study explores the capacity of ICT as an innovation tool. Five banks and thirty SMEs in Nairobi - Kenya were randomly selected for the study.

## II. LITERATURE REVIEW

According to Noel T. and Earnest N, [9], SME's are considered the nucleus of creating new business in any flourishing economy. In a policy brief on financing SMEs and Entrepreneurs, the Organisation for Economic Co-operation and Development (OECD) showed that SMEs account for a large share of the private sector economy representing between 96 and 99 per cent of the total number of enterprises in these economies, [10]. However, according to Sanjay Sethi, [11] most Micro Small and Medium Enterprises (MSME) units get into the weak or sick mode within the first 16 months of operation.

In order to better understand challenges facing technology entrepreneurs, *infoDev* commissioned a study to assess the current efforts by multilateral institutions and investors in addressing the financing needs of ICT and ICT-enabled SMEs in developing countries, and identified the key challenges and constraints to meeting these needs as lack of infrastructure, logistics and marketing support [12].

The European Bank for Reconstruction and Development [15 ] devised a strategy as a work plan to support Micro, Small and Medium-sized Enterprises (MSME). The strategy focuses on the core elements of the Bank's approach towards supporting the development of MSMEs in its countries of operation. The strategy further aimed to outline how the Bank can best support MSMEs across all of the Bank's countries of operations, strengthen the financial sector infrastructure dedicated to financing growth of MSMEs of all sizes, improve the business environment for MSMEs, and develop the skill sets of small entrepreneurs.

Richard Duncombe and Richard Heeks [16], presented a research framework for understanding ICT roles across a range of micro, small and medium-scale enterprise applications. In their findings, they concluded that when considering ICTs for enterprise development in developing countries, ICTs are a great means of SME – bank interaction.

The government of Ghana under its outsourced IT-enabled industry services (ITES) model commissioned the development of eGhana Project, an ICT-led framework aimed at enhancing the competitiveness and employment levels of Ghanaian MSMEs [17].

Debasish Maitra, a 2nd Year Student at the Institute of Rural Management Anand (IRMA- India in his reported research [18] “SME & Technology-A New Business Metric for Rural”, proposed an ICT-motivated architecture to accentuate the togetherness of business and technology. The framework would enable the rural community access to the practical information on small business and timely availability of market information via communication network to help them customize their products and businesses through the potential provided by wireless communications and networking in the rural areas.

In a white paper in 2008, United Nations Industrial Development Organization (UNIDO) in partnership with Microsoft Foundation, reported the development of a model aimed at making quality refurbished computers available to SMEs in an economic, environmental and social sustainable manner. The innovative project piloted through Uganda’s public-private partnership was meant to address the unmet needs of SMEs in accessing affordable quality PC solutions, thus contributing to their increased productivity, competitiveness and skill transfer [19].

In Kenya, Equity Bank in conjunction with Telkom Kenya launched an innovative mobile money platform - a versatile product that combines the features of mobile money transfer and mobile banking [21]. Orange money is powered by Equity Bank’s mobile banking platform. Orange money is mapped onto the customers’ bank accounts, making it possible for the customers to literally run their accounts from their mobile handsets, with the accounts security aligned to that of the Bank. This integration allows for the ease of interbank transfers and loan origination using the service for Orange Money customers.

Recently, NIC Bank launched NIC Online, an online banking system that will provide customers with easy access to banking services [22]. NIC Online allows customers to access banking services 24 hours a day to upload payments, in line with the bank’s strategy to offer customers easy access to its financial services, according to Alan Dodd, corporate banking director. The Internet banking system will allow better cash management for companies and individuals and is part of an expansion strategy that includes the openings of two branches in Thika and Kisumu, Dodd added.

NIC expects the system to considerably lower banking costs, given that it is relatively cheap compared to bank branch charges. Further, an E-payment, which allows corporate and business customers to make lump sum batch transfers, is currently available to customers, and NIC plans to have an e-

trade feature before the end of the year to help its customers conduct international trade online.

Kenyan banks have generally exponentially embraced the use of information and communication technologies in their service provision [23]. They have invested huge amounts of money in implementing the self and virtual banking services with the objective of improving the quality of customer service. Some of the ICT-based products and services include the introduction of SMS banking, ATMs, Anywhere banking software’s, Core banking solution, Electronic clearing systems and direct debit among others. In mid 2005, Kenya’s banking Industry moved a milestone by introducing Real Time Gross and Settlement system (RTGS) which was renamed Kenya Electronic Payment and Settlement system (KEPSS). This facilitates the inter-bank financial data transfer. The development of e-banking services is expected to decongest banking halls and reduce the incidences of long queues in banking halls. Digital- based financial services have made a significant contribution in covering the cost of offering financial services.

The banking industry has also over years continued to introduce a wide range of new products, prompted by increased competition, embracing ICT and enhanced customer needs. As a marketing strategy, the new products offered in this segment of market, continue to assume local development brand names to suit the domestic environment and targeting the larger segment of local customer base. Among the products, include Islamic banking which was introduced in 2005, tailored in line with “Shariah” principles. Currently, Barclays Bank of Kenya, Kenya commercial Bank, K-Rep-Bank and Dubai Bank have so far introduced Islamic banking products in the market.

Like many other developing countries, e-banking in Kenya is at its nascent stages. Not many banks have embraced e-banking but majority have at least one or two technology based delivery channels. The non adoption of e-banking by banks has been attributed to impaired non-availability of infrastructure and legislation to support e-banking [24].

### III. RESEARCH MODEL

The research is partially built around the Rogers’ Innovation Diffusion Theory (IDT) [25],[26]. According to Rogers, diffusion is the “process by which an innovation is communicated through certain channels over a period of time among the members of a social system”. He also defines innovation as “an idea, practice, or object that is perceived to be new by an individual or other unit of adoption”. The model defines five key factors that can influence an individual or individuals to adopt an innovation namely: relative advantage, compatibility, complexity, trialability, and observability.

The study also takes into account the IBSA framework defined by Malek AL-Majali, [25]. IBSA lays out the fundamentals in the use of technology to communicate instructions and receive information from a financial institution where an account is held as well as the enabling system for financial institutions, customers, individuals or business to access accounts transact business, or obtain information on financial products and services through a public or private network”. IBSA literature suggests six success factors or constructs for IBSA (perceived ease of use, perceived usefulness, compatibility, trialability, trust, and awareness).

words, it is similar to perceived usefulness. In his work, Rogers [26] concludes that relative advantage requires the adopter to analyze the costs and benefits of using an innovation.

IV. RESEARCHFRAMEWORK

The proposed research framework comprises of several factors that commonly contribute towards relative advantage both to the customer as well as the financial institution as shown in figure 1below.

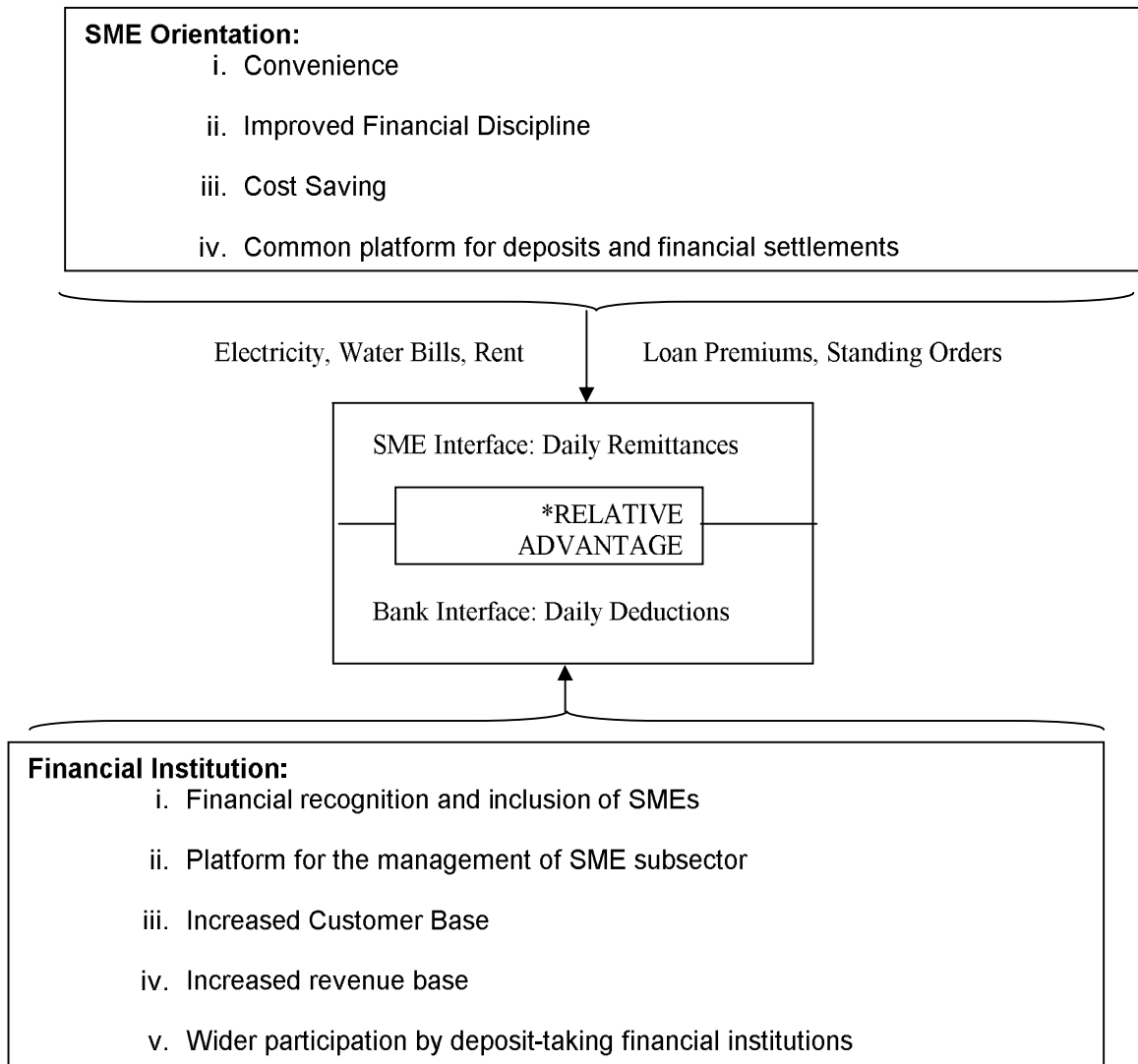


Fig.1: Research Framework

In our study, we isolate relative advantage (real or perceived) as the key factor that drives individual and corporate innovation. In his reported work, Rogers describes relative advantage as “the degree to which an innovation is perceived as being better than the idea it supersedes”. In other

A. Research Design

To answer the research questions, the survey research design was used. This study was concerned with information systems and technology as an innovative solution to recognition of SME’s capacity to meet their financial obligations.

*B. Population*

The study focused on banks and microfinance companies operating in Nairobi. There are approximately 10 such organizations that formed the population of the study.

*C. Data Collection*

Simple random sampling technique was applied in selecting the sample for the study. A sample of 30 SMEs was selected. The data was collected by distributing questionnaires to selected banks and SMEs. The SME questionnaire had total 13 questions while the bank questionnaire had 8 questions which the respondents had to answer either yes, no, don't know or provide a short non-categorical response.

*D. Instruments*

Secondary data was collected to provide a wider understanding of issues under research. Primary data was collected through direct interviews with respondents and use of questionnaire.

*E. Pilot testing*

A pilot test was conducted with a randomly selected sample of three enterprises and this helped establish the validity and reliability of the questionnaire

*F. Data Analysis*

Quantitative data was summarized using descriptive statistics. Qualitative data was derived from reading the responses of the open questions. The data was reviewed, summarized and placed in categories fitting the research questions. Inferences from analyzed data were made and this helped answer the research questions relating to factors influencing the development of SMEs in Nairobi - Kenya.

Finally data is going to be analyzed by using Frequency distributions. Frequency distributions is used to determine whether the dependent variable (relative advantage) is directly influenced by the independent variables such as convenience and cost saving.

V. HYPOTHESES DEVELOPMENT

*A. Hypothesis 1*

H0: ICT does provide a convenient medium for SME – Bank interaction

Ha: ICT does not provide a convenient medium for SME – Bank interaction

*B. Hypothesis 2*

H0: The use of ICT does result in improved financial discipline

Ha: The use of ICT does not result in improved financial discipline

*C. Hypothesis 3*

H0: Use of ICT leads to Cost Saving by SMEs

Ha: Use of ICT does not lead to Cost Saving by SMEs

*D. Hypothesis 4*

H0: ICT provides a common platform for deposits and financial settlements

Ha: ICT does not provide a common platform for deposits and financial settlements

*E. Hypothesis 5*

H0: ICT does facilitate financial recognition and inclusion of SMEs by Banks

Ha: ICT does not facilitate financial recognition and inclusion of SMEs by Banks

*F. Hypothesis 6*

H0: ICT provides a platform for management of the SME subsector

Ha: ICT does not provide a platform for management of the SME subsector

*G. Hypothesis 7*

H0: ICT results in increased customer base

Ha: ICT does not result in increased customer base

*H. Hypothesis 8*

H0: Use of ICT leads to increased revenue

Ha: Use of ICT does not lead to increased revenue

*I. Hypothesis 9*

H0: ICT leads to increased participation by deposit-taking financial institutions

Ha: ICT does not lead to increased participation by deposit-taking financial institutions

VI. FINDINGS AND DISCUSSIONS

A sample of 5 questionnaires for the banking institutions and 30 for SMEs were considered and the data was analyzed by IBM SPSS V19 to test the hypotheses. The analysis of the independent variables with respect to the dependent variable was tabulated as follows:

TABLE I  
ICT AND CONVINIENCE

Is mobile and internet banking accessible?

	Frequen cy	Percen t	Valid Percent	Cumulativ e Percent
Vali Yes	19	63.3	63.3	63.3
d No	4	13.3	13.3	76.7

	Dont know	7	23.3	23.3	100.0
	Total	30	100.0	100.0	

TABLE II  
ICT AND FINANCIAL DISCIPLINE

Online service and financial management

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	21	70.0	70.0	70.0
	No	4	13.3	13.3	83.3
	Dont know	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

TABLE III  
ICT AND COST SAVING

Does ICT reduce banking costs?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	23	76.7	76.7	76.7
	No	2	6.7	6.7	83.3
	Not sure	5	16.7	16.7	100.0
	Total	30	100.0	100.0	

TABLE IV  
ICT AND COMMON PLATFORM

Common ICT And Deposits And Financial Payments

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	27	90.0	90.0	90.0
	Dont know	3	10.0	10.0	100.0
	Total	30	100.0	100.0	

TABLE V  
ICT AND FINANCIAL INCLUSION

Recognition of SME as a separate and unique customer base

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	4	80.0	80.0	80.0
	No	1	20.0	20.0	100.0
	Total	5	100.0	100.0	

TABLE VI  
ICT AND FINANCIAL RECOGNITION

Do you have Unique products for SME?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	100.0	100.0	100.0

TABLE VII  
ICT AND DEPOSIT-TAKING FINANCIAL INSTITUTIONS

SMEs and Participation by Deposit taking financial institutions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	3	60.0	60.0	60.0
	Don't know	2	40.0	40.0	100.0
	Total	5	100.0	100.0	

TABLE VIII  
ICT AND INCREASED CUSTOMER BASE

**SME- Oriented ICT Services And Customer Base**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0
d				

TABLE IX  
ICT AND INCREASED REVENUE

**Mobile and internet and Operations Costs**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5	100.0	100.0	100.0
d				

TABLE X  
SUMMARY OF THE RESULTS OF THE NINE  
QUESTIONS ASSUMED

Questions	% +ves (Yes)	% - ves (No)	% Other	Result
Does ICT does provide a convenient medium for SME – Bank interaction	63.3	13.3	23.3	Possibly yes
Is the use of ICT result in improved financial discipline	70.0	13.3	16.7	Yes
Does the use of ICT lead to Cost Saving by SMEs	76.7	6.7	16.7	Majorly yes
Does ICT does provide a common platform for deposits and financial settlements	90.0	0.0	10.0	Yes it does
Does ICT facilitate financial recognition and inclusion of SMEs by Banks	80.0	20.0	0.0	Yes it does
Does ICT provide a platform for management of the SME subsector	100.0	0.0	0.0	Yes it does
Does ICT result in increased customer base	100.0	0.0	0.0	Yes it does
Does use of ICT lead to increased revenue	100.0	0.0	0.0	Yes it does
Does ICT lead to	60.0	0.0	40.0	Majorly

increased participation by deposit-taking financial institutions				yes
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VII CONCLUSION:

Considering that the questionnaire was pilot tested for validity and reliability, the analysis of the Quantitative data using descriptive statistics and presented using tables and percentages showed that the questions were acceptable. The system can actually be a convenient medium to enhance interaction between SME's and Banks. In as much as SME's are depending on banks for finance, banks require assurance on settlement of debts. A steadfast IS can therefore enhance access to financial facilities for SME's. It will provide a common platform for deposits and financial settlements to boost their financial management and eventually reduce banking costs for SME's.

The findings of this research established that SMEs do indeed face challenges in managing their finances and would greatly welcome a bank-led solution to overcome them. It is true that SMEs not only contribute significantly to improve living standards, employment generation and poverty reduction but they also bring about substantial domestic or local capital formation and achieve high levels of productivity and capability.

VIII. RECOMMENDATIONS

The findings of this research point to two main causative factors as to why SMEs are performing below standard. One relates to banking habits and the other is poor management of funds. Therefore banks should develop an ICT solution through which SMEs can channel their daily earnings to enhance financial management. SME's require a system that can reduce their costs in terms of time and interest charges. Daily deductions of monthly commitments such as rent and other utilities can free the SME's to concentrate on the business while capturing the financial institutions through conviction that their loan settlements are automatic.

From these findings, it is recommended that banks and the micro-finance work together to develop appropriate information technology that will help ease the burden of managing their revenue and expenditure.

The SME sector can certainly be an effective tool for a rapid industrialization of the economy as long as it is backed by adequate financing and information on financial management.

## REFERENCES

- [1] Urve Venesaar and Piret Loomets. The Role of Entrepreneurship in Economic Development and Implications for SME Policy in Estonia. 14th Nordic Conference on Small Business Research, May 11-13, 2006, Stockholm, Sweden.
- [2] Vision 2030. Flagship projects. Accessed from: <http://www.vision2030.go.ke/index.php/pillars/project/Economic/39>
- [3] Marion Mbogo. (2011). Influence of Managerial Accounting Skills on SME's on the Success and Growth of Small and Medium Enterprises in Kenya. *Journal of Language, Technology & Entrepreneurship in Africa Vol. 3 (1)*
- [4] Winifred Ambunya. (January 2012). Equity funds court SMEs fleeing high interest rates.
- [5] Challenges Facing SMEs in Kenya. Workshop held at KICC (April 2012).
- [6] Making business loans a reality for micro and small enterprises in Kenya. Report by USAID Kenya (May 2010).
- [7] Mobile money takes East Africa by storm. A report by micro-finance Africa (April 2012).
- [8] Branchless Banking A report by FSD-Kenya. (2009).
- [9] Noel Tagoe, Ernest Nyarko, Ebenezer Anuwa-Amarh. (2005). Financial Challenges Facing Urban SMEs under Financial Sector Liberalization in Ghana. *Journal of Small Business Management, Vol. (43)*
- [10] <http://www.oecd.org/dataoecd/53/27/37704120.pdf>
- [11] Sanjay Sethi, secretary – (micro, small and medium enterprises), government of Maharashtra, India. Financial times.
- [12] Scaling Up ICT-Enabled Innovation & Entrepreneurship in Developing Countries: *The Role of Private Sector Finance*. Retrieved from: <http://www.infodev.org/en/Project.28.html>
- [13] John Wesonga, Afroprenuer. Facing and addressing the challenges as an SME in Kenya.
- [14] Margi Levy and Philip Powell (2005) Strategies for growth in SME's. Elsevier Limited.
- [15] Micro, Small and Medium-Sized Enterprises Strategy. Document of the European Bank for Reconstruction and Development. (2006)
- [16] Richard Duncombe and Richard Heeks (November, 2005). Information & Communication Technologies (ICTs), Poverty Reduction and Micro, Small & Medium-scale Enterprises (MSMEs). A framework for understanding ICT applications for MSMEs in developing countries
- [17] IT-Enabling Services (ITES) Industry Support Sub-Component. An ICT-based SME model by GoG. Retrieved from: <http://www.ites.gov.gh/IT-Industry.aspx>
- [18] Debasish Maitra. SME & Technology-A New Business Metric (April 2010).
- [19] Promoting Public-Private Partnerships: An innovative business model to foster pro-poor growth through Information and Communication Technology (ICT). UNIDO-Microsoft report (December 2008)
- [20] Roberto Zavatta . (June 2008). Financing Technology Entrepreneurs & SMES in Developing Countries: Challenges and Opportunities. An *infoDev* publication
- [21] Orange Money is Launched in Kenya, Powered by Equity Bank. Equity News. (November 2010)
- [22] Kenyan bank launches online banking. By Rebecca Wanjiku, IDG News Service, Nairobi Bureau. (11 Jul, 2008)
- [23] Richard Nyangosi. (July 2008). E-Banking: An Integration Technology in Kenya.
- [24] Isaac Awuondo. (Sept 2006). *e-Banking in Kenya: Practical lessons to be drawn*
- [25] Malek AL-Majali. Modeling the antecedents of internet banking service adoption (IBSA) in Jordan: A Structural Equation Modeling (SEM) approach
- [26] Mohammed Ather Akhlaq. (April 2011). Internet Banking in Pakistan. *Journal of Internet Banking and Commerce*. vol. 16 (1 )
- [27] Azyanee Luqman. (August 2011). E-business Adoption amongst SMEs: A Structural Equation Modeling Approach. *Journal of Internet Banking and Commerce*. vol. 16 (2)
- [28] Ersida T.,Rezarta M. (January 2011). Assessment of E-Banking Services and Legal Framework in Albania. *Mediterranean Journal of Social Sciences*. vol. 3 (2)
- [29] Scaling-Up SME Access to Financial Services in the Developing World. (October 2010). G20 Seoul Summit, IFC (World Bank). Financial Inclusion Experts Group | SME Finance Sub-Group.
- [30] Kamini Singh. (August 2011). Innovated Technology in Banking Services. *Journal of Internet Banking and Commerce*. vol. 16 (2)
- [31] Thomas O., Peterson O., Stephen O., Richards B. (2010). Technology and Service Quality in the Banking Industry: Importance and Performance of Various Factors Considered In the Electronic Banking Services. *African Journal of Business & Management*. vol. (1)
- [32] Adegboyega O., Tomasz J. and Elsa E. (April 2007). Domain Models and Enterprise Application Framework for Developing Electronic Public Services. UNU-IIST Report No. 369