

FACTORS CONTRIBUTING TO LOW LEVELS OF ICT ADOPTION BY SMES IN GWERU CITY, ZIMBABWE.

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ABSTRACT

Information communication technology has made immense contributions to economic development across the globe. But the adoption of ICTs among many SMEs faces many challenges that have left many governments' developmental goals in limbo. The main purpose of this study is to explore factors contributing to low levels of ICT adoption by SMEs in Gweru city, Zimbabwe. The qualitative research approach was used in this study. The study used open ended questionnaires, face to face in-depth interviews, focus groups and document analysis in line with the merits of data triangulation to authenticate the collected data. 30 purposively selected participants came from building material shops, micro business shops, small steel businesses, car spare shops and grocery shops. The issues emerged from the data were analysed thematically. The research revealed a low capacity of ICT adoption among entrepreneurs and this has been ascribed to lack of finance, poor supply of electricity, inadequate infrastructure, inadequate support from government and other financial institutions. Due to the immense contribution to economic development the government and other stake holders must support, sustain and fund ICT adoption among SMEs to revive the economy. Minimization of excessive regulations, bureaucracy and red tape in accessing loans and policies that maintain stable operating rules for SMEs must be the way to go. However, it is the author's view that a national survey research be conducted to authenticate these results without any reservations of bias.

Key words: ICT usage, SMEs, adoption, ICT skills.

*** PRINCIPAL LECTURER: GWERU POLYTECHNIC COLLEGE**

1. Background Information

SMEs form more than 99% of all enterprises in the world (Capital Markets Authority, 2010). Their importance has earned great research attention across the divide. The critical role played by Small to Medium Enterprises (SMEs) in organisations has taken centre stage through the adoption of Information and Communication Technology (ICT) in developed and developing countries Zimbabwe included. Ongori (2009) agreed that the use of ICT would help to change the way business operate in this era of globalization by changing business structures and increasing competition, creating competitive advantage for business operations. Ireferin, Abdul-Azeez and Tijani (2012) are of the opinion that many organizations of all types are currently utilizing Information and Communication Technology (ICT) around the globe, not only for cutting costs and improving efficiency, but also for providing better customer services. ICT has brought about changes in the way businesses are conducted amongst SMEs as they play a major role in storing, retrieving, processing and disseminating information (Apulu and Latham, 2009). Ihua (2009) maintains that about 97% of the entire enterprises in Nigeria are SMEs and they employ an average of 50% of the working population as well as contributing up to 50% to the country's industrial output. This is a critical point for Zimbabwe to take notes and learn better lessons to revamp its economy along the robust support channelled to boost SMEs operations. ICT being known for its immense contribution to economic development, researchers lament that adopters of ICT remain with no option other than to embrace the innovation and foster better operations of SMEs in all spheres of life. Gagnon and Toulouse (1996) ascribe the use of ICT in business as no longer a matter of choice but rather one of survival, with a better understanding of the process of adopting new technologies as both essential and urgent. Where as Kotelnikov (2007) also suggested that SMEs 'who have not yet adopted ICT will have trouble in surviving' and will lose out to competition. It is therefore becoming more ever important for SME operators to adopt ICTs in their businesses in order to improve the quality of service to customers. However, the degree of adoption may not be the same but having fixed lines, mobile phones, a personal computer may be the starting point. While there are multiple benefits of ICT adoption there are several constraints that impede the levels of adoption mostly in developing countries and in Zimbabwe critical attention to unravel the factors contributing to low levels of ICT adoption has been long overdue. Such is the case because the environment in which an organization operates is an important factor to be considered while studying challenges to

technology adoption (Kapurubandara & Lawson, 2006). Zimbabwe has got an environment of its own kind confronted with political and economic forces which are still yet difficult to arrest. The country has been going through a gradual economic and political evolution for more than a decade, and like any other sectors the ICT sector has been affected (Tafirenyika, 2010). According to Mazango (2008), the country has received less attention from researchers in part due to the recent tension between the state and private operators.

a).Purpose of the study

The main purpose of this study is to explore factors contributing to low levels of ICT adoption by SMEs in Gweru city, Zimbabwe.

b).Statement of the problem

Information and communication technologies (ICTs) have become a priority among developed and developing nations. The adoption of (ICTs) plays a significant role in supporting growth of SME businesses. Several research studies have investigated and found SMEs constrained in taking advantages of ICTs. This study sought to unravel the factors inhibiting ICT adoption among SMEs in Gweru city, Zimbabwe.

c). Research Objectives

- To establish the main factors which contribute to low levels of ICT adoption by SMEs in Gweru urban.
- To establish the main benefits of ICTs and SMEs to businesses in Zimbabwe.
- To proffer interventions to mitigate low levels of ICTs adoption in Zimbabwe.

d). Research Questions

- What could be the factors responsible for low ICT adoption by SMEs?
- What are the main benefits of ICT and SMEs to businesses in Zimbabwe?
- How can SMEs improve ICT adoption in Zimbabwe?

2. Review of related literature

ICT is defined as any technology that facilitates communication and assists in capturing, processing and transmitting information electronically (Apulu & Latham, 2009c). Ideally ICT is

responsible for the transaction of data to give meaning which is critical for decision making. The World Bank (2004) further defines ICT as consisting of the hardware, software, networks and media for the collection, storage, processing, transmission and presentation of information in the form of voice, data, text and images. This research adopts Mpfu et al.'s (2009) definition of ICT which states that ICT is any technology used to support information gathering, processing, distribution and use. As there are as many definitions of ICT, there are as many varying definitions of SMEs in many countries whose economic development levels are also varying. South Africa (2004) categorise small organisations into four categories namely micro enterprises, including survivalist enterprises; very small enterprises; small enterprises; and medium enterprises. In Zimbabwe the SMEs are grouped into Micro Enterprises which have fewer than 10 employees, Small Enterprises have between 10 and 49 employees and Medium- sized Enterprises, have fewer than 250 employees (European Union,2003). This study adopts the SMEs definition from the European Union.

Research on “The Role of ICT in Doing Business” by The World Bank (2004) found out that ICT is playing an important role in allowing businesses to grow faster and become more productive. To this effect firms that embrace ICT services are poised to harvest growth in profits and investments. Empirical studies by Brynjolfsson and Yang (1996) confirm the positive effect of information and communication technologies (ICT) on firm performance in terms of productivity, profitability, market value and market share. Sajuyigbe and Alabi (2012) in their research agreed that ICT play an important role in SMEs by cutting costs through improving internal process and product, fast communication with their customers. Also Ojokuku and Sajuyigbe, (2012) argued that SMEs have the opportunity to achieve a competitive advantage from the advances in ICT through innovation, marketing, efficiency gains, better quality and customer responsiveness and better promoting their products through online presence. Also Apulu and Latham (2011) agreed with other researchers' views and commented that with ICT, organisations can exchange real-time information and build closer relationships with their customers, suppliers and business partners.

Further researchers have made it clearly known and loudly heard that SMEs are the corner stone of economic development. Okongwu (2001) argues that SMEs are recognized as the main source

of economic growth and a major factor in promoting private sector development and partnership, in developed and developing countries. Empirical research findings from Nyambonga et al, (2014) opined that the global economy is heavily dependent on the success of Small to Medium Enterprises (SMEs) which create employment, poverty alleviation and balanced developments which bring about economic growth in rural and urban setups. Furthermore, Ongori (2009) states that in the present era of globalization, SMEs must have an ability to compete and dynamically respond to rapidly changing markets as it plays a significant role in an organization's growth and success.

2.1 Factors affecting ICT adoption in Zimbabwe

ICT adoption is facing daunting challenges among the SME operators mainly in developing countries (Ahiakwo, 2002; Anao, 2002; Longe and Chiemekwe, 2006). Have cited the challenges of sustainable wired and wireless networks cost of connection, security issues, political instability/policy inconsistencies and lack of effective coordination. Previous studies on ICT adoption report that SMEs in developing countries have not fully capitalised on technological developments to extend their businesses beyond traditional borders: off-line identification of customers, use of multiple intermediaries and marketing channels constrained by distance (Humphrey et al, 2003; Shemi and Procter, 2013).

Despite being recognized as the key to economic growth, the SME sector in Zimbabwe remains grossly under-funded and unsupported (Mambo, 2010). "The Zimbabwe government is yet to recognise that they cannot afford to be the sole driver of economic growth without, the intervention of SMEs and the private sector" (Machona, 2006: 63). Kapurubandara (2006) in his research also highlights that lack of telecommunications infrastructure such as poor internet connectivity, lack of fixed telephone lines for end user dial-up access, and the underdeveloped state of the Internet Service Providers are factors affecting the proper utilization of ICT amongst SMEs in Sri Lanka. According to Arendt (2008), most SMEs do not develop ICT training plans for their businesses. The majority of Nigeria SMEs managers are sceptical of investing in ICT due to the high cost of training their employees and also, due to the high cost of maintaining the various ICT equipments. Lack of support from government and banks and lack of education and skills are also attributed to as barriers to ICT adoption in developing countries. Baker (2008) in

his study identified that less than 20% of the Nigerian population have access to stable electricity supply. The same factor is even catastrophic in Zimbabwe where there are epileptic incessant power cuts. In developing countries some of the ICT challenges include legal and regulatory issues, weak ICT strategies, lack of research and development, excessive reliance on foreign technology and ongoing weaknesses in ICT implementation (Dutta *et al* 2003). Furthermore, other factors discovered to contribute to low levels of ICT adoption include lack of infrastructural facilities, lack of funds, cost of implementation, lack of awareness, lack of appropriate government policies, lack of skills and training, cultural factors, electricity constraints, corruption, low levels of education, illiteracy, lack of proper information, and so on (Adenikinju, (2005, Sajuyigbe and Alabi 2012, Lal 2007, Apulu and Emmanuel, 2011, Apulu and Latham 2011). After breaking all inflation records, experiencing a chronic shortage of capital and international political isolation, Zimbabwe's ICT sector is showing signs of recovery (Kwinika, 2009). Besides this assertion there is long way to go specifically for Zimbabwe SMEs to adopt and benefit their businesses through ICTs. To be driven by a political will is different from to be driven by self motivation to revive and resuscitate businesses of SMEs especially during these days of globalisation. It becomes imperative to weigh the factors that contribute to ICT adoption by SMEs in Zimbabwe. Besides Zimbabwe is not operating from a normal business environment like other countries in Africa, so this research is mostly ideal given that Zimbabwe is pulling a load of 90% unemployment.

3. Research Methodology

This research was conducted using a qualitative research approach. Qualitative research is defined as “the use of qualitative data, such as interviews, documents, and participant observation data, to understand and explain social phenomena (Myers. (1997)”. The decision to use a qualitative research approach stemmed from the nature of the research propositions. This approach enabled the researcher, through the analysis of people’s spoken words, to gain new understandings and make sense of situations, experiences and processes. In line with the qualitative research approach observation, focus group discussions, open-ended questionnaires and face to face interviews were used to gather primary research data. The secondary data came from the documents analysed as evidence of ICT products such as company reports and memos. Two Focus groups of eight entrepreneurs each were conducted from individual micro businesses

mainly in the steel fabrication. The data from questionnaires and interviews came from building material shops, micro business shops, and car spare shops and grocery shops. Individually interviewed were eight owner managers and all the responses were captured and thematically analysed in line with qualitative research approaches. All the participants of this study were purposefully selected. This study had chosen to use various sources of data analysis so that diverse points and views cast light up on a topic. Thus qualitative researchers generally use this technique to ensure that an account is rich, robust, comprehensive and well-developed, (Denzin, 1978).

4. Findings and Discussion

4.1 Factors contributing to low levels of ICT adoption

The major objective of the study was to establish the factors contributing to low levels of ICT so that mitigating interventions can be employed to bring sanity to SMEs businesses.

4.2 Financial related factors

There are disparities noted in the adoption of internet services in the SMEs. An array of reasons has been levelled to unequal usage of the internet in the organisations. Mambo (2010) warns that despite being recognized as the key to economic growth, the SME sector in Zimbabwe remains grossly under-funded and unsupported. All of the SMEs are self sponsored and finance has proved a set back for these businesses to afford adoption of the ICT in full force, while some external barriers can be addressed by sharing expenses, resources and facilities (Molla, 2005). The lack of financial resources in this study was found to be a significant constraint to ICT adoption. From the perspective of the interview participants, the cost related to ICT investments was the main issue. The following statements illustrate the view points of the participants.

“ICT adoption comes along with its costs and some of us we sponsor our businesses from our own coffers. There are purchase costs, installation costs to maintenance costs. These require huge sums of money.”

“Huge investments require huge amount of money while small ones require less but the support institutions like SEDCO still requires collateral security up front, which is beyond our capacity”

“My business is too small and there is no need for me to get into financial cost when I can just use a cell phone for any other communications with customers and suppliers.”

In light of the above statements made by SME operators financial challenge is a barrier that impedes ICT adoption. Out of the 50 participants 90% highlighted financial resources as obstacle to the adoption of information technology. In both developed and developing countries SMEs have been found to be financially constrained due to lack of access to external financing. Some studies attributed this to weak and absence of well developed institutions (Beck and Demirguc-Kunt (2006). Taking cognisance of sponsorship Apalu and Emmanuel, (2011) asserted that finance is a major factor that determines the ICT adoption in SMEs especially in developing countries. Most of the SMEs owner- managers agreed that the cost of deploying ICT systems and services is high and could be an inhibitor.

4.2 Poor electricity supply

Yu (2010) considers ICT as a range of technologies that allow the gathering, exchange, retrieval, processing, analysis and transmission of information. This understanding may exist sparingly among the SME operators but the biggest issue of concern is the availability of electricity. The study revealed that poor supplies of electricity in Zimbabwe seem to affect adoption and usability of ICTs. Some small business owners have raised concern due to power cuts which affects the benefits brought by ICT tools.

“While ICTs improve our businesses in several ways we are compound by challenges because electricity power cuts are rampant. Switching to generators increase the costs of benefiting from the adoption and use of this technology.”

“If electricity supply is reliable we can achieve mile stones, such as through fast communication with our customers and suppliers, tracing and tracking our business growth and many other benefits that come along with this innovation.”

In light of the above statements from owner managers electricity supply plays a pivotal role to gainfully benefit from ICT adoption. Members of the focus group who are one, two or three in their businesses concurred with these findings and highlighted that *“our micro businesses have*

suffered loss as a result of power cuts that are not even planned. We have lost businesses to those who can operate with generators during the long stay waiting for electricity to come back.” These findings were confirmed by Baker (2008) who investigated the adoption of ICT in SMEs in Nigeria and in his study identified that less than 20% of the Nigerian population have access to stable electricity supply. Similarly Mangwengwende (2005:1) underscored that “Zimbabwe’s producers and consumers experience very high levels of electricity unreliability.” Apparently it is clear that lack of electricity affects all forms of businesses ad SMEs included.

4.3Lack of communication net work

The empirical findings of this study pointed out that infrastructure are most important factor that predicts the adoption of ICT that is from the point of view of the participants. Both views from the interviews, focus group and owner managers highlighted the following opinions. *“We may not have the adequate knowledge to use and manage ICTs but there seems a very slow and little motivation from those who provide ICT infrastructure development. Yes we have cell phones, calculators and computers but no internet connections. Significant challenges with wireless internet have been raised over and over again but the prompt action is invisible.”* This revelation may seem to mean that the SMEs may hold a positive desire to have ICT but it is not getting the support that encourages adoption. Lawrence and Tar (2010) indicate that most developing countries are characterised by unreliable and poor internet connections due to poor telephone communication and erratic power supply. The results of this study augers well with Kapurubandara (2006) who highlights that lack of telecommunications infrastructure such as poor internet connectivity, lack of fixed telephone lines for end user dial-up access, and the underdeveloped state of the Internet Service Providers are factors affecting the proper utilization of ICT amongst SMEs in Sri Lanka.

4.4Lack of education

The study also revealed that skills and training have significant effect to ICT adoption. This may imply that the knowledge and experiences in ICT have a strong bearing in adopting the technology. The participants in this study echoed varying perceptions on the use and adopting ICT. *“Sometimes we hail this new development but there is dire need to undergo some training so that we are able to understand, adopt and use the ICT, provided it brings benefits that make*

our businesses live and prosperous. I can not vie for change which I do not understand, some changes do suffocate people.” This understanding may seem to mean that adoption of ICT may depend on familiarity and otherwise the easy with which one can use it. Lack of knowledge and skills among SME work force becomes a major barrier in adopting ICT. These findings are in agreement with a study findings from Cragg and King (1993) who found that one of the strongest inhibiting factors for small firm to implement information technology was the lack of information system knowledge. This study also revealed that some owner manages do not want to make rush adoptions since the cost of training is to be bone by the owner. One operator said *“I incur the cost of employee training and with that knowledge he leaves for better paying companies, therefore there is no prudence in that.”* This observation does not accelerate IT adoption rather its use is minimally accepted. These findings follow what Macgregor et al (1996) who put forward that small businesses tend to avoid ICT into their business, if it is seen as complex to use, this is not surprising because SMEs may always lack skills amongst workforce to use ICT.

4.5Lack of government interest and support

In most cases the effective support of programmes that are in line with government initiatives used to get the government support. The results of this study have failed to establish even one entrepreneur who had got government support within the past five years. The participants from the focus group lamented that: *“Yes SMEs may be hailed for its economic development but the government has taken long rest to assist SMEs. Despite the fact that support institutions have been put in place to assist SMEs but there is nothing taking shape. Small to Medium Enterprise Ministry is in the president’s office and Small Enterprise Development Corporation (SEDCO) are both mandated to assist SMEs but nothing is materialising.”* The results seem to point out that the Zimbabwe government has interest and is willing to support SMEs but absence of financial support has turned out to be is a big set back for SMEs growth. *“One owner manger said it is difficult to get finance from support institutions because they demand collateral security which way beyond our capacity. Our country is still sieged by sanctions and liquidity problems are the order of the day. I can not blame any one.”* The situation prevailing during the time of the study blatantly shows absence of support to SMEs. Let alone support to adopt ICT during these testing times is difficult. Similar results to a research like this one seems to echo similar

findings. Presently in Nigeria most banks do not give out loans to SMEs and some banks such as the Agricultural Development Banks that are mandated to give loans to SMEs require collateral such as landed properties, shares and capital but the inability of most SMEs to present the required collateral remains a major setback (Owoseye, 2010). This situation has left many SMEs at risk of business failure and the mindset of adopting ICT is seriously discouraged.

On the same note this study revealed that the attitude of the owner manager has implications in adopting ICT. Caldeira and Ward's (2003) study confirming that positive attitude of top management has brought about the relative success of IS/IT adoption in SMEs, especially in manufacturing ones. Where the attitude of management is negative adoption of ICT is very low presumably. Most of the SMEs Owner/Top Managers agreed that the cost of deploying ICT systems and services is high and could be an inhibitor. Thus this study found out that the decisions of the owner manager can either hinder or encourage ICT adoption.

5. Conclusions

The empirical findings of this study come up with the following conclusions.

This study found out that the SME operators were found to use the following IT resources in their businesses:- Calculators, cell phones, desk tops, fixed lines,

- There are benefits that come from the investment of ICT in SME businesses and these include increased service delivery, faster communication, quality service and products.
- Most of the SME operators who make online orders of raw materials from countries like China and South Africa have adopted and use ICT for such specific purposes.
- Most of the SMEs have access and use internet wireless using personal modems and the heavy users of internet, access it either through lap tops, fixed lines or cell phones. Emails, whatsapp, sms and direct phoning are mode of communication with made to reach their clients.
- The major deduction from the study is that the extent of awareness, skills and working knowledge has not yet approached the adequacy level to increase adoption of ICT among many SME operators. Most SMEs are in early stages of ICT adoption.
- Financial resources, poor infrastructure, poor supply of electricity, attitude of the owner manager, communication networks, lack of education and skills and lack of government support are factors that inhibit effective adoption of ICT by entrepreneurs.

6. Recommendations

- The government needs to try to minimize excessive regulations, bureaucracy and red tape in accessing loans and policies that maintain stable operating rules for SMEs must be put in place (Mabhandu and Kurebwa, 2015).
- In this study the government is advised to provide adequate electricity and infrastructure as the most important factors to determine levels of ICT adoption in SMEs.
- The government needs to create an environment that is conducive for ICT development as well as improve public awareness and access to technology through establishing ‘Telecenters’ and introducing computer programmes in educational institutions.
- SMEs should invest time and money in educating staff and management about benefits that come with ICT adoption and this will also assist SMEs to utilize ICT which, in turn will help to drive the country’s economy.
- In addition, there is need for the banks in Zimbabwe, to review their policies in terms of supporting ICT and the normal request for collaterals as most SMEs can hardly meet up with their demands.

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