

# Smes access to information technology information technology essay

[Technology](#), [Information Technology](#)



## **2. 1 Introduction**

This section of the study seeks to present material that involves the adoption of information technology in SMEs and what factors affect or influence the extent to which this automation is utilized in their day - to - day operations. The section comprises of the available literature on the factors affecting the successful adoption and implementation of ICT in retail supermarkets based on the three study objectives. The summary and gaps in the literature review are also presented in this section.

## **2. 2 Definition of ICT**

According to Ritchie and Brindley (2005) ICT refers to the array of primarily digital technologies designed to collect, organize, store, process and communicate information within and external to an organization and, in our case, SMEs. ICT covers technologies like the simple telephone, point-of-sale systems, stand-alone PCs, networked environments, Internet and credit card facilities. Mutula and Van Brakel (2006) agree that information is an important asset that gives small and medium enterprises (SMEs) a competitive advantage in the new economy.

## **2. 3 SMEs Access to Information Technology**

Globalization, technological sophistication, access to technology and technological discoveries have seen an increased numbers of businesses built on quality assurance, high-tech innovations and intellectual property (Nasser et al, 2003). SMEs need access to appropriate technology if they are to have competitive advantage (Rogerson, 2001). Inability to secure

technology at start-up can impact negatively on the entrepreneurship development process in today's world of globalization (Clover & Darroch, 2005). For South Africa's disadvantaged societies, access to technology remains very limited (Themba et al, 1999; Robertson, 2003). Appropriate ICT applications can assist SMEs to respond quickly to the external environment; tap into global information, networks and markets; gain in efficiency and business performance; increase managerial competence; reduce costs; increase turnover; increase profitability; reduce work in progress; improve the working environment; improve effectiveness and ability to retain existing clients plus achieving more flexibility and speed (Marri et al, 2003; Goolnik, 2002). The potential benefits of modern technology and technological capabilities to SMEs are well known. According to Morse et al., (2007) technological capabilities benefit SMEs in several ways. Technologies enhance SME efficiency, reduce costs, and broaden market reach, both locally and globally. absence of technological capabilities hinders and discourages SMEs from fully grabbing the benefits of new technologies, including, among others, lack of knowledge, resources and training. There are different organizational functions that can be undertaken through automation. According to McIvor & Humphreys (2004) these include using ICTs to strengthen company internal operations, such as logistics, procurement, and human resource and contracts management, information and data management, communication functions, and to facilitate the flow of products between businesses and consumers, e. g. marketing, ordering, payment, delivery, and searching for suppliers. Adoption of electronic commerce offers a great opportunity to SMEs to gain greater global access

and reduced transaction costs, provides substantial benefits via improved efficiencies and raised revenues; facilitates access to potential customers and suppliers, productivity improvements, customization of products and services and information exchange and management (UNCTAD, 2002). ICT adoption by SMEs is influenced by many factors which have compelled SMEs to adopt ICT for survival growth, sustainability and competitiveness.

However, there are many forces which tend to influence the process of ICTs adoption in SMEs which include; micro and macro environments, human capital, firm structural characteristics, competitive strategy and internal organization. The study will however cover literature on material that is directly related to the adoption of information technology in the day to day operations of retail SMEs in Kenya. According to the Economic Survey of 2011 there was positive growth in the wholesale and retail trade under which supermarkets fall from a growth rate of 3.9% in 2009 to 7.8% in 2010; the sector also contributed to employment opportunities.

## **2.4 Barriers to ICT Adoption in SMEs**

There are a number of stumbling blocks or barriers that make it difficult for SMEs to adopt ICT. Several authors have identified different barriers in their works and are summarized in this section.

### **2.4.1 Lack of Knowledge**

According to Martin (2005) there is a lack of knowledge about the potential benefits of ICT and strategies to support SMEs in achieving their business objectives. SMEs face the challenge that generally they are owner managed and the owner makes all or most of the decisions about the business

(strategic direction). Unfortunately the owner-manager's limitations become limitations of the business.

### **2. 4. 2 Lack / Poor Skills in ICT**

Lack of necessary IT skills-base (Mutula & Van Brakel, 2007) as the owner is the centre of the business, making all or most of the decisions in the small business, so the adoption of ICT by the small business depends on the owner's ICT skills, personality and attitude towards technology. The IT-skills problem forms part of the bigger problem of a shortage of specialists in IT/ICT in Africa.

### **2. 4. 3 High Cost of ICT**

Perceived high setup cost (Jackson, 2007; Herselman, 2003) ICT is perceived to be expensive by SMEs so they often do not have a budget for it. There are different types of costs associated with ICT: product/solution, development, connectivity, hardware, software, maintaining workforce and hidden costs such as annual license fees, upgrade fees, etc. These costs can be overcome by having the right knowledge and know-how.

### **2. 5 Information Technology Adoption in Retail SMEs**

Information and communication technology (ICT) is a double-edged sword in this context (Turban, King, Viehland and Lee, 2004). On the one hand, it can be a threat to smaller retailers for its disintermediation effects and competition through e-tailing (Chircu & Kauffman, 1999), and by its supply chain management effectuation of the larger (franchise) organisations (David, 2008). On the other hand, ICT likewise provides opportunities to

smaller retailers, like opening up new sales channels, reducing administrative tasks and/or enabling strategic management of their enterprise (Turban et al., 2004). According to Plomp et al. (2012) the specific type of retail ICT that can be employed to achieve effective store management is a ' Point-of-Sale' (POS) system. POS systems are defined in many different ways. On Wikipedia, a retail POS system is defined as " a computer, monitor, cash drawer, receipt printer, customer display and a barcode scanner". Webopedia. com defines a POS system as " the capturing of data and customer payment information at a physical location when goods or services are bought and sold". YourDictionary. com defines it as: " A comprehensive computerized checkout system that includes a bar-code scanner, receipt printer, cash drawer, credit and debit card scanner, monitor, and inventory management software. A point-of-sale system tracks sales and identifies inventory levels in real time". According to Plomp et al. (2011) since POS management information is based on sales figures, retailers can improve their business by maintaining a better product strategy and pursuing a more efficient replenishment process matching customer demand, alleviating what is often referred to as the ' bullwhip effect' (Lee, Padmanabhan & Whang, 1997). It can therefore be expected that POS systems lead to higher performance and support the development of small retailers (Parkan, 2003). Professionalizing through ICT may particularly help the small, independent retailers to improve their competitive position against larger retailers and internet based vendors. Despite their potential benefits and their wide availability on the Dutch market, POS systems are not (yet) widely used by smaller retail organisations. Statistics from the Dutch central

industry board for retail trades (HBD, 2009) show that in 2008, 30% of retail organisations actually used a POS system. This adoption level differs per branch, ranging from 57% for supermarkets to 10% for shops for household products. The high percentage witnessed among supermarkets signifies the important role that POS systems play in supermarkets. Although there is scarce research and data on the growth of the supermarket sector supermarkets in Kenya; Neven and Reardon (2005) contend they have grown from a tiny niche at the start of the 1990s to 20% of the urban food retail sector in 2003. Kenya's supermarket sector growth has been almost completely indigenous and endogenous. Before 1993, the main chains stuck to their headquarter cities. However, Uchumi broke this pattern in 1993 by building its first store outside Nairobi, in Nakuru, starting a national level competition that has build-in crescendo (Neven & Reardon, 2005). The Supermarket industry in Kenya dates back to the mid seventies when Uchumi supermarkets opened shop in Nairobi. However, the industry witnessed most changes in the nineties. The growth of the supermarket sector in Kenya has been driven by two factors (Bosire et al. 2010); first, there has been rapid urbanization. Second, supermarket growth in Kenya really took off in 1995 after the 1993 policy changes were starting to have an effect. Policy changes included liberalization and stabilization which had several important effects for supermarkets among them included import licensing removal and market liberalization. Again, there was a mild and short-lived recovery of the economy in 1995/6 which gave consumers the buying power to try all these new products that supermarkets were marketing to them.

## **2. 6 Influence of SMEs Management on ICT Adoption**

According to Modimogale (2010) SMEs face the challenge that generally they are owner managed and the owner makes all or most of the decisions about the business (strategic direction). Unfortunately the owner-manager's limitations become limitations of the business. This barrier can be classified as a strategic level problem. ICT needs to be considered a key player in the SME reaching its goals. The owner is the centre of the business, making all or most of the decisions in the small business, so the adoption of ICT by the small business depends on the owner's ICT skills, personality and attitude towards technology. Competent management skills are a prerequisite for the success of SMEs (OECD, 2002). Management competence (or know-how, capacity, abilities and skills) are a set of factors associated with successful businesses, as they give the entrepreneur the ability to perform a role successfully and the power to act effectively in a particular range of possible future circumstances (Ibrahim & Soufani, 2002; Markman & Baron, 2003). It is imperative that the management of the firm should possess relevant ICT skills in order to facilitate the adoption of appropriate technology in the firm. ICT skills are defined as those skills that allow the entrepreneur the optimal use of IT, including the computer applications which give businesses strategic competitive advantage, as well as everyday business operations (Baard & Van den Berg, 2004). Studies (Seyal & Rahman, 2003; Rashid & Al-Qirim, 2001) reveal that the success of the innovation adoption step in organizations rests on the role of managers in the adoption process in enterprises among others. The more positive the perception of managers towards new technologies, the more quickly the innovation is adopted. In



SMEs, it is the owner/manager who initiates, participates in project electronic commerce and establishes a clear goal for their ventures (Hostager et al, 2004). To move forward owner/managers need to be enthusiastic, passionate and a firm believer of the benefits of electronic commerce and must be committed to considering as playing electronic commerce a significant role in the organization (Jones, 2004). Owner/Manager in SMEs needs to combine elements of both leadership and management in their role during the entire implementation cycle of implementing electronic commerce in their ventures. SMEs owners/managers who have positive attitude towards innovative and knowledgeable about Information Technology (IT) are likely to adopt ICTs in their business and vice versa (Nguyen, 2009). Indeed, owners/ managers who are in position to recognize opportunities and threats in their environment especially in choosing the market target are in position to develop appropriate strategies to retain and increase their market share by adopting ICTs in their business to access to local and global market. Top management support is an important ingredient for the successful implementation of information system in any business whether large sized firms and SMEs as well. The leadership of the firm sets the tone to the utilization of the implemented system and this attitude is taken up by employees of the firm. However, poor commitment of resources to ICT in SMEs has been identified as a major constraint (Singh et al, 2012). Mutua and Wasike (2012) study on ICT adoption and performance of small-medium-sized enterprises in Kenya found that the education and training of the manager has a positive correlation to the adoption of technology in the firm. Thus a manager with some training in ICT is likely to influence the

adoption of ICT in the firm. According to Thong (1999) the owner/manager characteristics are identified to the CEO's innovativeness and Information System knowledge and the attitude. In fact, " unless the CEO has the will to innovate there is little that other members of the business can do to expedite IS adoption or increase the extent of adoption. A survey among 166 Singaporean small organisations in the manufacturing, commerce and service industry was used to validate these assumptions. Results showed that firm size, the CEO's innovativeness, attitude towards IT adoption and IT knowledge were indeed positively correlated with IT adoption (Plomp et al. 2011). However, Martin (2005) points out that the owner-managers have the following limitations. Firstly, capability gaps or knowledge gaps prevent effective technology use and selection. Secondly, their intuitive and organic styles of management have important consequences for the way in which they evaluate and use technology. Thirdly, owner-managers' personal skills and mind-sets influence their organizations' culture which means that if the owner-manager is technology averse it will be difficult to adopt ICT and use it as a tool.

## **2. 7 Influence of System Implementation in Adoption of Business Automation**

Adoption of information technology among SMEs in developing economies have continued to increase over the years, most of these SMEs lack internal skills necessary to develop ICT solutions (Ayyagari et al., 2007). As a result, most of them rarely develop their ICT solutions internally. Due to the lack of internal skills within the SMEs in developing economies, most of them are unable to internally develop systems that can address their unique needs

(Agbeibor, 2006; Duncombe & Molla, 2009). There are two levels of adoption. Initially, the innovation must be purchased, adopted, and acquired by an organization. Subsequently, it must be accepted by the ultimate users in that organization also called the implementation. According to Sanford (2003) SMEs are often forced to settle for Consumer off - the - shelf (COTS) solutions. Similarly, Aryeetey (2001) notes SMEs often have difficulties in gaining access to appropriate technologies and information on available techniques. In most cases, SMEs utilize foreign technology with a scarce percentage of shared ownership or leasing. They usually acquire foreign licenses, because local patents are difficult to obtain. Many of these solutions more often are designed and developed in more advanced countries into account the need of their enterprises. With SMEs in developing countries operating under different conditions (Todaro & Smith, 2006), such systems end up not meeting the unique needs of these SMEs. According to DeLone and McLean (2003), however, efficiency and effectiveness of an ICT are largely dependent also on the quality of the ICT being adopted. It therefore means that SMEs should not only concentrate on the above mentioned ICT success contributors, but should also equally ensure that the ICT solution they are adopting is of good quality. A quality ICT needs to satisfy all the stakeholders (management, developers, and users) (Ozkan, 2006). Chau (1995) researched which factors are important for small businesses in software selection. His research focused on packaged software, as small organisations usually do not buy custom developed software, due to their limited resources. Chau argues that owners/managers of small organisations are less focused on budgeting techniques like ' net present value' or '

internal rate of return' to make decisions on software investments. Instead, they focus more on criteria aimed at the functionalities and popularity of the software. This would often lead to the lack of operation and maintenance which may be limited to internet options from the manufacturer website thus limiting internal implementation and support of the system. Barriers to successful ICT adoption by SMEs in developing economies can be summarized as follows (Ayyagari et al., 2007) among others is the lack of sufficient time to dedicate to the implementation and maintenance of ICTs compared to ICT success stories being attributed to among other indicators is the involvement of owner/manager in the implementation of ICTs D'Atri & Sacca, 2009). According to Ndiege et al (2012) three definitions of ICT adoption can be identified. The variations stem from the varied use of the term within the stages of ICT adoption. These three-stage process includes; First, the decision making stage, when information about the desired ICT is collected, evaluated, and the decision to adopt ICT is made 2) Second, the implementation stage, when the ICT components are installed 3) Third, the evaluation stage, when the ICT that was implemented is evaluated. The study will however limit itself to the implementation and maintenance of the installed information system. According to Lim (2006) most SMEs in Malaysia realize that ICT is critical to the productivity and performance of their companies. But, implementation and maintenance of these ICT systems is restricted due to inability to handle, owing to high staff turnover and lack of ICT project management expertise. Similarly, Tan (2006) argues that ICT in Malaysia is facing big challenges due to the slow adoption of technology by SMEs in Malaysia. Due to these challenges SMEs involve ICT consultants to

develop systems which they can use in their business operations where SME owner/managers found themselves repeatedly dependent on ICT suppliers and external consultants in dealing with technology problems and implementation challenges. When this is seen in combination with high levels of distrust of ICT consultants and vendors, we see a general picture of helplessness and frustration for these SME managers. Zindiye (2008) survey of the SME sector often cite respondents complaining about not knowing where to go for procuring the most cost effective technology. This technology will enable SMEs to service their clientele, however, they end up investing in costly technology which sometimes might not be suitable for their operations. The lack of sources for information has also been identified as a barrier towards the effective adoption of information technology as indicated in the 1999 Kenya National Micro and Small Enterprise Baseline Survey. Due to lack of information SMEs may fall to dubious agreements with system developers as they have limited means to information and also protect themselves from such risks. Ritchie and Brindley (2005) mainly look at the barriers or diffusion agents that prevent the SME from adopting ICT. One of these is Technological. This level deals with issues relating to the complexity of technology and professional support for the technology in relation to the production of goods and services. This level should underpin the above level of strategy, by implementing IT/ICT strategic plan in order to build a good IT/ICT architecture.

## **2. 8 Influence of Education and Training on Adoption of Business Automation**

Most of successes of high growing SMEs relates to the promotion of their employees' abilities through training at all levels or participation of top executive managers (Fuller, 2008). studies (Batra & Tan, 2003); Lee (2001); McElwee & Warren, 2000) recognize low human resource capabilities as major constraint in SMEs development in developing countries. According to Taylor et al (2004) SMEs have a continuous weakness in diagnosing and determining the educational needs, applying education and education' evaluation. Staff training is vital for the survival of businesses and maintaining the competitive advantage of organizations. Training human resources and increasing their capacity and expertise, promote productivity of employees and managers of SMEs. Human resources in SME generally are weak in terms of their knowledge and skills of market analysis, marketing and product innovation as well as business planning and financial management. Therefore, the need is to develop capacity building programmes to improve the entrepreneurial and business management skills of human resources in SMEs and enhance the effectiveness of SMEs. Firms with a literate and well-educated workforce are thus likely to be more efficient because of their greater capability to absorb and effectively utilize new technology (Hussain et al, 2012). Studies (Bowen, Morara & Mureithi, 2009) indicate a positive relationship between training and educational level with the performance of SMEs. They recommend for Kenyan SMEs to get trained in an area that is relevant to the business carried where SMEs have a strong human capital enjoy more success compared to others that may not

have a strong human capital. Undertaking an empirical analysis of ICT use in manufacturing firms in Kenya, Migiro and Wallis (2006) found a very insignificant level of computer literacy among the manufacturing SME operators; only 20 respondents of the 380 respondents were computer literate while 360 were not. The respondents rated their information technology skills as below average and 205 (54%) of the respondents indicated that they used outside consultants to handle their computing requirements. It was found that a majority of the SME operators in the study had not used information and communication technologies (ICTs). According to Ongori & Migiro (2011) the availability of human capital within and outside the organization is a driving force in ICTs adoption in SMEs. The human capital availability acts as facilitating factor in ICTs adoption by SMEs. The availability of educated human capital with the required ICTs skills tends to act faster and they are more receptive to new ideas and techniques. Better educated employees tend to create the flexibility needed to ICTs adoption and innovation (Roffe, 2007; Mohamad & Ismail, 2009). Olsen and Eikebrokk in Bharati and Chaudhury (2008) study the relationship between training, competence, and the performance of SMEs in the context of e-business. The study is based on the performance of 339 SMEs in Norway, Finland, and Spain that had access to training supplies from 116 providers of e-business-related training. The empirical findings document a positive relationship between training, competence, and performance and show that training explains variances in e-business competence and performance in terms of efficiency, complementarities, lock-in, and novelty. Studies have shown that firms that invest in ICTs are more productive (Bannock, 2005; Katz & Green,

2010; Dhillon et al., 2009; D'Atri & Sacca, 2009). Adoption of information technology in any business has to meet the human capital requirements which are specific to the system in use. Specific systems have to do with the extent to which efficiency and effectiveness of the nature of the business as noted by Levy and Powell (2005) ICTs play a fundamental role in helping SMEs increase efficiency, effectiveness and competitiveness. According to Stylianou and Kumar (2000) SMEs need to determine how they can take best advantage of IT in order to support its operations, add value to its products and services, and gain competitive edge in the market place. When human effort is substituted by ICT, the ICT are considered to have automated a task or process. When the human effort is supplemented by ICT, ICT are considered to have informed a task or process. It is imperative to note that although adoption of ICT in the firm may provide business benefits, acceptance and utilization of the systems is also important. Ndiege et al. (2012) argues ICT adoption process could result into either ICT being accepted and used to support the operations of the SMEs, or rejected altogether. The acceptance and usage of ICT is often associated with proper framework and structures being put in place to provide a favourable environment for effective and efficient operation of the ICT solution. Adequate training and support are required (Wei & Morgan, 2004). It is useful to outline that one of the main difficulties for SMEs in exploiting ICTs potentials is the lack of awareness of the benefits to be derived coupled with little or no specific training on ICTs (both at application and methodological levels). The adoption of continuous training solutions can play an important role in increasing the awareness of the huge potentialities of ICTs for



concrete situations; in this way employees, managers, and entrepreneurs can acquire a learning culture, integrating the training in their work activities and understanding in depth the potentialities of communication and information tools (Brady et al., 2002; Magretta, 1998; Smith & Blanck, 2002). Management of SMEs should provide adequate pre-training to their employees on how to use ICT systems in business at all levels so that the employees should get comfortable with its use. Although research Pavic et al, 2007; Wymer & Regan, 2005) indicates lack of internal ICT expertise as a major challenge for SMEs; (Harindranath et al. (2008) survey on the factors affecting the adoption and use of ICT in southeast England SMES found that less than a quarter of respondents felt this to be a constraint. However, as shown elsewhere (Mehrtens et al, 2001), those firms with easy access to even limited ICT-literate staff were more likely to adopt ICT than those without. As shown by this study and others (for instance, OECD, 2004), often such individuals are not ICT professionals but regular employees with a keen interest in ICT matters. Firms with a literate and well-educated workforce are thus likely to be more efficient because of their greater capability to absorb and effectively utilize new technology (Hussain et al. 2012).

## **2. 9 Definition of Outsourcing**

Outsourcing is the practice of allowing an outside company to handle services that would normally be performed in-house. Customer service, human resources and distribution are all commonly outsourced departments. While outsourcing a computer doesn't make much sense, some companies

do allow an outside service provider to handle computer services or information technology services for its business. Curtis (2001)

## **2. 9. 1 How to Conduct an Outsourcing Interview**

You do not have to be a multimillion-dollar company to outsource company work. Outsourcing refers to the practice of going outside your company to hire contractors to perform work that, in the past, personnel completed on company property. While the labor savings from outsourcing can be significant, businesses also save because they do not have to pay matching tax contributions or provide benefits on the outsourced jobs. Whether you are outsourcing a small customer service department to a call center across town or a large manufacturing division to another company, conduct your interview much as you would when conducting a contractor interview. Prepare for the interview. Determine what your business requires of an outsource provider. Write a brief statement about the nature of the work and what you are looking for in an outsourcing company. Write a list of interview questions. Sectioning your questions by type can help keep the interview on track. Call the outsourcing company to make an appointment for the interview. Estimate an approximate length of the interview for your appointment schedule. Ask your office personnel to hold your calls during the interview time to prevent disruptions. Ask questions regarding the background and history of the outsourcing company, its ability to meet the needs of your company and its stability. Ask for proof that the outsource provider meets all of the laws and regulations for employers in its location. Asking questions that require more than a " yes" or " no" answer can provide

information that leads to additional questions you did not think of before the interview. Take notes during the interview for use to refresh your memory when making a decision about the company to hire. Note the interviewee's nonverbal, as well as verbal, communication. Ask how the provider will handle problems caused by its employees and compensate for lost revenues if the outsourcing company does not perform as promised. Summarize the interview on paper after the interviewee leaves. Write your summary while the interview is fresh in your mind; that way you will have an accurate record to reference when selecting the outsourcing provider for your company.

Nichols (2002)

## **2. 9. 2 Benefits of Outsourcing**

**Save Money-**While companies that outsource IT services enjoy many benefits, saving money is one of the most compelling reasons for doing so. Outsourcing helps control capital outlay, especially in the early years of operations. IT services make up fixed costs for companies that do not outsource. Businesses that choose to outsource IT, whether offshore or through a local contractor, convert those fixed expenses to variable ones, freeing up capital for use in other areas. This makes the business more appealing to investors, since the company has more capital to funnel into areas of operations that directly produce revenues. **Control Expenses-**Businesses that choose to perform every aspect of operations internally must pass on the expenses associated with these activities to customers. Outsourcing IT services to a company that specializes in business networks and support alleviates some of this expense, giving the business a

competitive edge in regard to pricing of goods and services. Focus on Core Operations-Outsourcing IT services allows business managers to concentrate on core goals and objectives. Some managers may have to split their energies between activities that engage prospective customers and concerns with operations outside of the core business objectives. Outsourcing alleviates this necessity, and the business managers can focus their energies where their competencies lie. IT Resources Near Those of Big Businesses- Many small businesses do not have the budget or resources necessary to implement the IT systems and services they need in-house. Large businesses have the resources to maintain cutting edge systems and services themselves. Outsourcing IT systems and services creates a more equitable playing field between small firms and large enterprises. Gluck (2000) Cost- The biggest advantage of outsourcing a computer department for your company is the cost. The human resource expense of hiring, training and maintaining an entire department for your company can be significant. Outsourcing these positions often saves you a large percentage of your overhead because you're paying the fee to a company that already has the necessary processes in place. Labor Focus-In addition to saving money, outsourcing can save time. Computer services require a specialized skill set and the time to execute the necessary tasks. If you and your staff don't have the time or skills to perform these tasks, attempting to do them may take longer than necessary. It also may take time away from what you and your staff do best. For example, for every half hour your salesman spends struggling with a computer/printer setup or installing new software, he may be losing a sale of your product or services. Curtis (2001)

## 2. 9. 3 Risk of Outsourcing

Dubious Accessibility Businesses that must rely on an outside service run the risk of downtime during critical system failures, leading to potential loss of productivity. It may take days before a busy IT contractor can devote attention on the business problem and resolve the issues. This may leave workers idle and cause hundreds to thousands of dollars in lost revenue.

Loss of Personal Touch An in-house network administrator becomes intimately familiar with the eccentricities and unique characteristics of the network he manages. Because of this, he is able to deliver results more efficiently, quickly and personally. IT outsourcing can never provide a personal touch that comes close to that of an in-house IT specialist. Many managers reject the thought of giving this up, even though they can save money by outsourcing.

Substandard Security Protocols Businesses considering outsourcing IT services must investigate whether the managing company employs security measures as robust as their own. This is especially important when dealing with offshore companies run from a foreign country. While these often have impressive security protocols, a risk of one of the outsourcing company employees breaching security always exists. Since the foreign country may not have laws protecting intellectual property or other private data, businesses may find it difficult to prosecute such illegal activity.

Gluck (2000) Slower Response Times While many IT outsourcing firms try their best to be responsive, it is difficult for a company located halfway across the country--or halfway around the world--to provide the level of responsiveness and attention that an on-site IT department can. Customers and employees who had been used to an instant response to

their problems might be left waiting for hours, or even days, resulting in lower productivity and increased dissatisfaction. Computer problems can bring your small business to a halt, so think long and hard about the potential downsides when evaluating IT outsourcing opportunities. Lack of Familiarity If your company uses non-standard software, the outsourcing firm might not be able to provide the level of support your business requires. Specialized database, imaging and other types of software require an in depth knowledge on the part of support personnel, and the staff members at the outsourcing firm might not have the necessary expertise to keep those complex systems up and running. Conrad (2003)

## **2. 10 Summary and Gaps in Literature Review**

The study reviewed literature on the various factors that influence the adoption of ICT in SMEs. The section comprises material from both developed and developing countries SMEs and the challenges and opportunities that they experience from integration of ICT in their business operations. The study was able to identify both internal and external environment forces that influence business automation; however the study was more concerned with the organizational forces i. e. the management characteristics, implementation and support of business automation and staff education and training in computer skills. Although studies discuss different organizational factors affecting ICT adoption in SMEs there is less research on the organizational factors which the study seeks to investigate in developing countries SMEs and specifically focus on retail SMEs which have contributed

to Gross Domestic Product (GDP) in the modern sector in Kenya according to the Economic Survey 2011.