

Technological innovations in bank of africa

[Finance](#), [Banks](#)



This study sets out to ascertain customers' perception on the effect of IT innovations or electronic delivery channels in Bank of Africa (U) Ltd. The study specifically, examined the extent of bank's innovativeness in information technology in B. O. A; the level of service delivery in B. O. A in relation to IT innovations and the employees' perception of the effects of IT innovations on service delivery in B. O. A. A descriptive cross sectional survey was used. In the study, quantitative techniques were employed in the data collection process, analysis, presentation and discussion of findings.

The data used in this study was primary, collected from the IT employees and customers in selected branches of B. O. A using self-administered structured questionnaires and oral interviews. The results of the study generally indicate that, technological innovation or electronic delivery channels have contributed positively to the provision of banking services in Bank of Africa particularly ATMs and internet banking. Therefore, for banks to remain competitive there is considerable need to be innovative by adopting and diffusing various IT innovations.

The study recommends increased investment in IT innovations in Bank of Africa and other banks in Uganda in order to be competitive. Keywords: IT, Innovations, Service delivery Introduction The integration of world economies has opened an array of business opportunities as well as challenges for firms. Increased standardization activity reflects, among other factors, demand by consumers for safer and higher quality products, technological innovations, the expansion of global commerce and the increased concern by many governments to societal and welfare issues.

Firms in service sectors such as banking are under constant pressure to perform better, cheaper and faster. The developments in information and communication technology (ICT) are radically changing the way business is done. Electronic commerce is now thought to hold the promise of a new commercial revolution by offering an inexpensive and direct way to exchange information and to sell or buy products and services. This revolution in the market place has set in motion a revolution in the banking sector for the provision of a payment system that is compatible with the demands of the electronic marketplace (Abor, 2005).

To fully satisfy the diversifying requirements of customers, many banks in Uganda have continuously adopted information or automation technologies. Many studies have found that innovation is the most important tool for enterprises to keep their competitive advantage (Damanpour and Evan, 1984; Kimberly and Evanisko, 1981). Indeed, many banks like Bank of Africa are making what seem like huge investments in technology to maintain and upgrade their infrastructure, in order not only to provide new electronic information-based services, but also to manage their risk positions and pricing.

At the same time, new off-the-shelf electronic services such as online retail banking are making it possible for very small institutions to take advantage of new technologies at quite reasonable costs. These developments may ultimately change the competitive landscape in the financial services (Abor, 2005). While a number of studies have concluded that IT has appreciable positive effects on bank productivity, cashiers' work, banking transaction,

bank patronage, bank services delivery, customers' services and bank services (Abor, 2005; Yasuharu, 2003).

Few studies have examined their effects by analyzing the perceptions of the bank employees. This study evaluates the perceptions of banking employees regarding the effect of technological innovations on banking services in Uganda. Information technology and IT innovations in banking sector Information Technology (IT) is the automation of processes, controls, and information production using computers, telecommunications, software and ancillary equipment such as automated teller machine and debit cards (Khalifa 2000, Agboola, 2004).

It is a term that generally covers the harnessing of electronic technology for the information needs of a business at all levels. Innovations in information processing, telecommunications, and related technologies – known collectively as “ information technology” (IT) – are often credited with helping fuel strong growth in the many economies (Coombs et al, 1987). IT is defined as the modern handling of information by electronic means, which involves its access, storage, processing, transportation or transfer and delivery (Ige, 1995).

According to Alu (2002), IT affects financial institutions by easing enquiry, saving time, and improving service delivery. In recent decades, investment in IT by commercial banks has served to streamline operations, improve competitiveness, and increase the variety and quality of services provided. According to Yasuharu (2003), implementation of information technology and

communication networking has brought revolution in the functioning of the banks and the financial institutions.

It is argued that dramatic structural changes are in store for financial services industry as a result of the Internet revolution; others see a continuation of trends already under way. In a study conducted by Irechukwu (2000) in Nigeria, he lists some banking services that have been revolutionized through the use of ICT as including account opening, customer account mandate, and transaction processing and recording. Information and Communication Technology has provided self-service facilities (automated customer service machines) from where prospective customers can complete their account opening documents direct online.

It assists customers to validate their account numbers and receive instruction on when and how to receive their chequebooks, credit and debit cards (Agboola, 2004). The ICT products in use in the banking industry in many developing and developed include Automated Teller Machine, Smart Cards, Telephone Banking, MICR, Electronic Funds Transfer, Electronic Data Interchange, Electronic Home and Office Banking (Agboola, 2002). Why doesn't everybody innovate is a common question in business literature? It is widely recognized that innovation is key to the economic performance of firms.

Innovative firms grow faster in terms of employment and profitability. An innovation is an idea, practice, or object that is perceived to be new by a person or adopting entity. The innovation is not seen as something periodical that happened by accident nor something that results from the action of an

individual agent. Innovation is seen as the result of an interactive and non linear process between the firm and the environment. When an innovation emerges, diffusion unfolds which entails communicating or spreading of the news of the innovation to the group for which it is intended (Okunoye et al, 2007).

Adoption however is the commitment to and continued use of the innovation. The diffusion of innovations theory provide explanations for when and how a new idea, practice or newly introduced information and communication medium is adopted or rejected over time in a given society (Okunoye et al, 2007). Innovation is the generation, acceptance and implementation of new ideas, processes, products or services. This study is concerned with product innovation, i. e. , new products and the organizational processes that precede their launch.

What is then to be considered ' new'? When is it ' new enough' to be considered an innovation? The literature provides several frameworks to classify product newness, e. g. , from incremental to radical innovations. This study, however, is concerned with product innovation as a phenomenon, rather than with product innovations with a certain degree of newness. This includes significant improvements in technical specifications, components, and materials, incorporated software, user friendliness, or other functional characteristics.

Product development is used as a term for the span of innovation activities leading to, or that are intended to lead to, product innovation. According to Agboola (2004), the application of information and communication

technology concepts, techniques, policies and implementation strategies to banking services has become a subject of fundamental importance and concerns to all banks and indeed a prerequisite for local and global competitiveness. ICT directly affects how managers decide, how they plan and what products and services are offered in the banking industry.

It has continued to change the way banks and their corporate relationships are organized worldwide and the variety of innovative devices available to enhance the speed and quality of service delivery (Agboola, 2004, 2001).

However, most research about innovation focused on manufacturing industries though increasing attention has been paid to innovation in service industries recently (Gallouj, 2002; Howells and Tether, 2004; Miles, 2004).

The survival of an enterprise in the age of knowledge-based economy depends on how to improve their organizational innovation capability.

Technological innovation is the key variable and means of differentiation between logistics service providers. Commercial banks can increase their performance by employing new technologies. They should employ new information technologies to raise their service capability in the e-commerce age (Agboola, 2001). IT innovations in Uganda banking sector In the Ugandan's banking industry due to competition, IT investments and adoption has become a very important component in achieving organizational.

In recent past therefore, electronic and communications technologies have been used extensively in banking for many years to advance agenda of banks. The earliest forms of electronic and communications technologies used by the banks were mainly office automation devices. Telephones, telex

and facsimile were employed to speed up and make more efficient, the process of servicing clients. However, with coming of new partners in banking industry, competition intensified and the personal computer (PC) got proletarian, Uganda banks begun to use them in back-office operations and later tellers used them to service clients.

The advancements in computer technology have led to application and adoption new IT investments that have changed the banking landscape in the country. Arguably, the most revolutionary electronic innovation in this country has been the ATM. In Uganda, banks with ATM offerings have them networked and this has increased their utility to customers. The ATM has been the most successful delivery medium for consumer banking in this county. Others technological innovations in banking sector include internet banking, telephone banking, Electronic funds transfer, among others.

Forms of IT innovations and their effects on service delivery The following are the different forms of IT in banking sector. Automated Teller Machines (ATMs) Rose (1999) cited by Abor, describes ATMs as follows: “ an ATM combines a computer terminal, record-keeping system and cash vault in one unit, permitting customers to enter the bank’s book keeping system with a plastic card containing a Personal Identification Number (PIN) or by punching a special code number into the computer terminal linked to the bank’s computerized records 24 hours a day”. Once access is gained, it offers several retail banking services to customers.

They are mostly located outside of banks, and are also found at airports, malls, and places far away from the home bank of customers. They were

introduced first to function as cash dispensing machines. However, due to advancements in technology, ATMs are able to provide a wide range of services, such as making deposits, funds transfer between two or accounts and bill payments. Banks tend to utilize this electronic banking device, as all others for competitive advantage. The combined services of both the Automated and human tellers imply more productivity for the bank during banking hours.

Also, as it saves customers time in service delivery as alternative to queuing in bank halls, customers can invest such time saved into other productive activities. ATMs are a cost-efficient way of yielding higher productivity as they achieve higher productivity per period of time than human tellers (an average of about 6, 400 transactions per month for ATMs compared to 4, 300 for human tellers (Rose, 1999). Furthermore, as the ATMs continue when human tellers stop, there is continual productivity for the banks even after banking hours.

Telephone Banking Telebanking (telephone banking) can be considered as a form of remote or virtual banking, which is essentially the delivery of branch financial services via telecommunication devices where the bank customers can perform retail banking transactions by dialing a touch-tone telephone or mobile communication unit, which is connected to an automated system of the bank by utilizing Automated Voice Response (AVR) technology” (Balachandher et al, 2001). According to Leow (1999), telebanking has numerous benefits for both customers and banks.

As far as the customers are concerned, it provides increased convenience, expanded access and significant time saving. On the other hand, from the banks' perspective, the costs of delivering telephone-based services are substantially lower than those of branch based services. It has almost all the impact on productivity of ATMs, except that it lacks the productivity generated from cash dispensing by the ATMs. For, as a delivery conduit that provides retail banking services even after banking hours (24 hours a day) it accrues continual productivity for the bank.

It offers retail banking services to customers at their offices/homes as an alternative to going to the bank branch/ATM. This saves customers time, and gives more convenience for higher productivity. Personal Computer Banking “ PC-Banking is a service which allows the bank's customers to access information about their accounts via a proprietary network, usually with the help of proprietary software installed on their personal computer”. Once access is gained, the customer can perform a lot of retail banking functions.

The increasing awareness of the importance of computer literacy has resulted in increasing the use of personal computers. This certainly supports the growth of PC banking which virtually establishes a branch in the customers' home or office, and offers 24-hour service, seven days a week. It also has the benefits of Telephone Banking and ATMs (Abor, 2005). Internet Banking The idea of Internet banking according to Essinger (1999) is: “ to give customers access to their bank accounts via a web site and to enable them to enact certain transactions on their account, given compliance with stringent security checks”.

To the Federal Reserve Board of Chicago's Office of the Comptroller of the Currency (OCC) Internet Banking Handbook (2001), Internet Banking is described as " the provision of traditional (banking) services over the internet". Internet banking by its nature offers more convenience and flexibility to customers coupled with a virtually absolute control over their banking. Service delivery is informational (informing customers on bank's products, etc) and transactional (conducting retail banking services). As an alternative delivery conduit for retail banking, it has all the impact on productivity imputed to Telebanking and PC-Banking.

Aside that it is the most cost-efficient technological means of yielding higher productivity. Furthermore, it eliminates the barriers of distance / time and provides continual productivity for the bank to unimaginable distant customers. Branch Networking Networking of branches is the computerization and inter-connecting of geographically scattered stand-alone bank branches, into one unified system in the form of a Wide Area Network (WAN) or Enterprise Network (EN); for the creating and sharing of consolidated customer information/records (Abor, 2005).

It offers quicker rate of inter-branch transactions as the consequence of distance and time are eliminated. Hence, there is more productivity per time period. Also, with the several networked branches serving the customer populace as one system, there is simulated division of labour among bank branches with its associated positive impact on productivity among the branches. Furthermore, as it curtails customer travel distance to bank

branches it offers more time for customers' productive activities. Electronic Funds Transfer at Point of Sale (EFTPoS)

An Electronic Funds Transfer at the Point of Sale is an on-line system that allows customers to transfer funds instantaneously from their bank accounts to merchant accounts when making purchases (at purchase points). A POS uses a debit card to activate an Electronic Fund Transfer Process (Chorafas, 1988). Increased banking productivity results from the use of EFTPoS to service customers shopping payment requirements instead of clerical duties in handling cheques and cash withdrawals for shopping. Furthermore, the system continues after banking hours, hence continual productivity for the bank even after banking hours.

It also saves customers time and energy in getting to bank branches or ATMs for cash withdrawals which can be harnessed into other productive activities. As the importance of innovation in developing countries increases, so does the need for research on the subject. Evidence from the literature reviewed above shows that existing discourse on diffusion of IT innovation in banking sector has failed to focus much attention on rapid changes in IT development and its corresponding effect on service provision in developing countries like Uganda.

The available evidence from African countries has been in Nigeria. This study therefore closes this gap by presenting the effects of It innovations on service delivery drawing from a least developing country, Uganda. Statement of the problem The information and communication technologies are revolutionizing the banking sector over the years. The rapid development

and commercialization of Information and Communication Technologies (ICTs) banking industry has prompted banks to increasingly adopt these technologies.

This is based on the expectation that the new ICT based technologies and processes would lead to an improvement in their operating efficiencies and customer service levels. Bank of Africa since its merger in October 2006, a number of investments have been instituted and implemented to improve service delivery. That is to say, the bank's asset footing increased by 21% to Shs 102 billion (BOA Annual report, 2007). Despite these investments, there are no research studies investigating the impact of these developments particularly IT investments on service delivery.