# COMMERCIAL BANKS' PERCEPTION OF THE INFLUENCE OF MOBILE TELEPHONES ON GROWTH OF BANKING BUSINESS IN KENYA

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# DECLARATION

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## DEDICATION

This study is dedicated to my Parenta for their inspiration without which the	completion
of this paper would have not been a reality	

#### **ACKNOWLEDGEMENT**

I thank God for his grace and sustenance that has seen me complete this paper successfully I give thanks for bringing me this far

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#### **ABSTRACT**

One of the major challenges in the banking industry is the dynamic competitive environment in which banks operate. This has compelled commercial banks to adopt atrategies around internet banking, mobile banking and prestige banking. Although commercial banks use various strategies to position themselves in the market, it is not known the percaption of commercial banks to the influence of mobile telephones on growth of banking business in Kenya. The objective of this research was to determine how commercial banks percaive the influence of mobile phones on growth of commercial banking business in Kenya.

The study was modeled on a descriptive design. The population of interest in this study consisted of forty-five commercial banks. No sampling was done, as a census of all the commercial banks operating in Kenya was considered. The population of forty-five commercial banks was small enough to accommodate a census study and give o clearer picture of the findings that is used to arrive at justified generalizations on the findings from the study. Primary data was collected using semi-structured questionnaires.

The questionnaires were personally administored by the researcher to the commercial banks managers or equivalent. The questionnaire was divided into three parts. Part A contained questions on general information of the respondents. Part 8 contained questions on mobile banking and business strategies and Part C contained questions on how commercial banks perceive the influence of mobile phones on growth of commercial banking business in Kenya.

Based on the findings, it can be concluded that majority of the commercial banks do offer services through the customers' mobile phones it can also be concluded that commercial banks use mobile services for purposes of accounts request and the maintenance of high quality service is extremely important for the commercial banks in the Kenyan banking industry. Commercial banks management should change their perception on cost leadership, market share leadership and tachnology leadership in order to take advantage of the mobile banking technology in the growth of the banking industry.

#### CHAPTER ONE

#### INTRODUCTION

#### 1.1 Background of the Study

The global financial services industry has recently been open to historic transformation. The so called e-developments are emerging and advancing rapidly in all areas of financial intermediation and financial markets like e-finance, e-banking, e-brokerage, e-insurance, e-exchanges and even e-supervision (Lustsik, 2003).

Electronic banking (e-banking) is the contemporary delivery channel for banking services. The definition of e-banking services varies partially because it refers to several types of services through which bank customers can request information and carry out most retail banking services through the computer, television or mobile phone (Sethye, 1999) Burr [1996] describes e-banking as an electronic connection between bank and customer in order to prepare, manago and control financial transactions.

## 1.1.1 Growth Of Commercial Banking Business

Banks are privately owned or state-owned institutions that, generally, accept deposits and make loans. It is a commercial or state institution that provides financial services, including issuing money in form of coins banknotes or debit cards, receiving deposits of money, lending money and processing transactions. The distinguishing characteristic is their money supply through the creation of deposits (Bannock and Manser, 2003).

Banks can be classified into three types of institutions, commercial banks catering for industry/commerce, saving banks catering for the household and their savings, and mortgage banks providing housing loans for private as well as business. Over time, borders between the three types of institutions are getting blurred, and today the differences are clearly diminishing. Almost all retail banks are becoming more like financial supermarkets catering for all types of customers and all types of banking business, drawing upon specialized financial institutions for special tasks. Mortgage banks are approaching retail banks and commercial banks through the establishment of retail banking activities. In the future the difference is likely to disappear

Lustaik (2003) in a study of e-banking in Estonia conclude that online internet banking and mobile phone banking are the featest developing areas. Possttchi and Schung (2004) identify four use cases of mobile banking as request of account balances, control of account movements, instant payment and account administration. They

assert that the use cases correspond to specific customer needs and depend as well on the wreless device available for communication

Chency (2008) in examining mobile banking and mobile payments advance that the evolutionary path taken by mobile banking and mobile payments can be very different, depending on a variety of factors, including a market's level of banking sophistication, available technologies, and expenence with antecedent products, services, or technologies.

#### 1.1.2 Mobile Telephones

Mobile telephones are classified as portable mobile devices. A mobile device is defined as a wireless communication device, including mobile phones, PDA, wireless tablets and mobile computers.

In developing countries that include Kenya, mobile talephony has been adopted in the last decade at a faster rate mainly because of the economies in rolling out mobile networks than for the fixed line networks that dotted the population earlier. Many commentators have highlighted the rapid growth of mobile phone usage in Africa Gray (2005) points out, "in 2004 alone, the African continent added almost 15 million new mobile cellular subscribers to its subscriber base, equivalent to the total number of (fixed and mobile) telephone subscribers on the continent in 1996, just eight years earlier."

The rapid aproad of mobile phones means that the number of mobile users may already exceed the number of banked people in many low income countries. Mobile phones can also offer a communications channel for initiating and executing online financial transactions. This channel may not only reduce the cost of financial transactions for provider and customer, but also allow new entrants to the financial sector, and new relationships to be formed for distributing services. Those changes hold the prospect of accelerating access to financial services on the back of the mobile infrastructure (Portouse, 2006).

The mobile payment forum (2002) defined a mobile payment as the process of two parties exchanging linencial value using a mobile device in return for goods or services. Posstichi, et al. (2004) define mobile banking as a subset of electronic banking which underlies not only the determinants of the banking business but also the special conditions of mobile commerce. Mobile payments [m-payments] are financial transactions undertaken using mobile device such as a mobile phone. Mobile banking [m-banking] includes m-payments but involves access by mobile device to the broader

range of banking services, such as account-based savings or transactions products offered by banks. M-payments and m-banking are themselves subsets of the broader domains of e-payments and e-banking respectively (Portause, 2006).

# 1.1.3 Commercial Banks in Kenya

Commercial banking business in Kenya is guided by the banking Act Chapter 488 that provide for the licensing and regulation of commercial banks within its jurisdiction. The central bank of Kenya that regulates the sector has licensed forty-five commercial banks that are tiered into peer groupings as large, medium and small depending on the various bank sizes.

The vision 2030 for financial services in Kenya, as crafted by the government, is to create a vibrant and globally competitive financial sector that will create jobs and also promote high levels of savings to finance Kenya's overall investment needs. The Kenyan banking system has as well grown enormously in the last decade keeping pace with the country's aconomic growth. There has been significant improvement in the payments and settlements with electronic payments and RTGs (real time gross settlements) gaining quick acceptance. Information technology has played a major role in these achievements. Today, the banks have centralised operations, network based computing, and new delivery channels such as networked ATMs (Automated teller machines), Internet banking, smart card based products and mobile access.

#### 1.2 The Research Problem

Love (2005) in a paper titled, Delivering Services via Internet advance that traditionally, services have been characterized as low tech and high face-to-face contocts. Today, information technology offers many opportunities for service providers, Internet presents the new way for production, communication and distribution of services. In terms of distribution, for many traditional services like banking, insurance, travel and retail Internet encouraged disintermediation to certain extent, since it enables direct, two-way-communication without the need of going to the service outlet. But, this also means that customers must be motivated, willing and capable of using the Internet in their buying decisions and processes.

Rapid changes in the financial services environment—increased competition by new players, product innovations, globalization and technological advancement—have led to a market situation where battle for customers has become intense. In order to rise up to the challenges, service providers are even more interested to enhance their understanding of consumer behaviour patterns (Jain and Hundal, 2002)

The liberalization of the telecommunication sector has brought numerous challenges to firms whereby they are left with minimal options of either adopting new strategies or being pushed out of business as a result of stiff competition. Likewise, individual customers expect quality services, which meet their own expectations and will always buy required services from those suppliers who offer the bost products at premium rates (Anderson, 2008).

Wireless coverage continues to rise although only 8% of people in Africa use a mobile phone, 52% of the population in low income countries as a whole live in areas with wireless reception. This difference fuels the expectation that growth will continue at repid rates, with some analysts predicting that there will be close to 200 million mobile subscribers in Africa by 2010. By comparison, the penetration of retail banking systems in most African countries is very low [Portagus, 2006]

In Kenya, the forty-five registered commercial banks are involved in the financial sector deepening process, which entails developing initiatives towards increasing their clientale base in a cost effective way, and banking for the unbanked that has attracted intense competition and value added products. These efforts encounter the challenges arising from lack of proper physical infrastructure in certain regions of the country and a versatile terrain.

Competition in accessing banking services through the mobile phone has intensified. The cost of transaction charges is set to reduce aignificantly while banking hall queues will eventually ease out as the uptake of mobile banking service increases. The banking environment is changing: Modern banking is about differentiating products and services that provide increased choices, control, security and accessibility.

Banks are faced with a number of important questions, for examples how to take full advantage of new technology opportunities, how e-developments change the ways customers interact with the financial services provider. The new information technologies adoption and e-commerce emergence change the role of financial intermediaries in the new economy (Lusterk, 2003)

Interest in electronic commerce and electronic markets has largely been focused on America and Europe and yet there are many interesting developments taking place in Africa, which have received very little attention. In Kenya today, mobile phones have become a lifestyle product. In the contrary, a few banking halls have been labelled "M-banking" though their banking halls still attract queuing customers awaiting services in the academia, scanty studies have been undertaken on the perception of managers of

financial institutions on the role of mobile telephony in business growth.

Mobile banking literature asserts that mobile banking is all about freedom that enables users to pursue other interests than worrying about everyday jobs and transactions can be charged the same way as text messages are charged. This study undertakes to answer the question: How do commercial banks perceive the influence of mobile phones on growth of banking business?

# 1.3 Research Objectives

To determine how commercial banks perceive the influence of mobile phones on growth of commercial banking business in Kenye

## 1.4 Importance of the Study

The study will be of value to commercial banks in an attempt to address the chollenges and policy areas that inhibit adoption of mobile telephony banking. It would be a challenge to corporate entities that provide mobile telephony to improve on innovation and anhance the value of their service offering. The study would be of significance to the government initiatives for financial deepening and implementation of the digital capital and will be a referral material for future research initiative on related studies on mobile banking.

#### CHAPTER TWO

#### LITERATURE REVIEW

# 2.1 Communication

Kotler [2001] observe that many companies still rely on one or two communication tools to achieve their communication aims. This practice persists in spite of the fregmenting of mass markets into a multitude of minimarkets, each requiring its own approach; the proliferation of new types of media, and the growing sophistication of consumers. The wide range of communication tools, messages, and audiences makes it imperative that companies move toward integrated marketing communications [IMC]. He adds that, today there is a new view of communications as an interactive dialogue between the company and its customers that takes place during the pre-selling, selling, consuming, and post consuming stages. Companies must ask not only "How can we reach our customers?" but also "How can our customers reach us?"

As defined by the American Association of Advertising Agencies [4 As], IMC is: a concept of marketing communications planning that recognizes the added value of a comprehensive plan that evaluates the strategic roles of a variety of communications disciplines – for example, general advertising, direct response, sales promotion and public relations – and combines these disciplines to provide clarity, consistency, and maximum communications' impact through the seamless integration of discrete messages

Kotler [2001] underscore that to communicate effectively, marketers need to understand the fundamental elements underlying effective communication as presented in the figure on communication model on appendix four

The model underscores the key factors in effective communication. Sonders must know what audiences they want to reach and what responses they want to get. They must encode their messages in a way that understands how the target audience usually decodes messages. They must transmit the message through efficient media that reach the target audience and develop feedback channels to monitor the responses [Kotler, 2001]

Thanks to technological breakthroughs, people can now communicate through traditional media (newspapers, radio, telephone, television), as well as through newer media forms (Computers, fax machines callular phones, and pagers) By decreasing communication costs, the new technologies have encouraged more companies to

move from mass communication to more targeted communication and one-to-one dialogue (Kotler, 2001).

# 2.2.1 Information Technology

As the field of strategic management has expanded, strategy researchers and practitioners have shown increasing interest in the role of information technology (IT) in strategy formulation and implementation, and in its impacts on financial performance (Shaberwal and King, 1991).

A number of researchers examined the conditions under which information technology creates austainable advantages. Porter (1985), for example, focused on first-mover advantages, arguing that technological advantage arises when first-mover advantages [such as pre-empting customers through switching costs] outweigh first mover disadvantages (such as development costs and learning curves)

Clemons [1986] distinguished between externally focused applications – i.e. those that connect the firm with customers or suppliers (such as ATMs) and internally focused applications, i.e. those that improve efficiencies (such as factory automation systems). He suggested that external applications tended to produce advantages based on switching costs, whereas internal applications tended to produce advantages based on scale economies, managerial expertise and efficiencies.

Neo (1988), analyzing 14 well known information technology cases, concluded that the most successful information technologies implementers were those that had already implemented similar systems, having built an infrastructure of information technology experience and learning. Mahmood and Soon (1991) reported that, in most industries, information technology had no discernible impact on entry barriers, but that when impacts were present, they tended toward reducing, not increasing, entry barriers in a study connecting technology policy and strategy. Zahra and Cown (1993) found no direct technology – performance connection in Neo's (1998) study, information technologies persa, had little to do with performance, which was driven more by information technology oriented strategic planning and management vision and support.

Walton (1989) and Benjamin and Levinson (1993) classified resources as organizational, business, and technological, and argued that information technology performance depends on the integration of resources across these categories. Keen (1993) divided resources into human, business, and technology resources, and developed a fusion framework that strongly parallels resource based theory, arguing

that the key to information technology success lies in the capacity of organizations to fuse information technology with latent, difficult to imitate, firm specific advantages embodied in existing Human and Business resources

Reed and DaFilippi (1990) and Fiol (1991) argued that organizational cultures offer powerful forms of competitive advantage because they are difficult to articulate and require the simultaneous manipulation of complex relationships and technologies in resource-based empirical studies, Hanson and Wernerfelt (1989) found that human resource factors (i.e. organizational climate and goal directedness) explained greater proportions of performance variance than strategy and economic factors.

The information technology research also suggests that complementarities may exist between information technologies and organizational consensus, namely, organizational trust, cooperation, and the absence of fundamental conflict. In an empirical study of 168 Beigian firms, DeWoot et al., (1978) found that financial performance was not explained by technical innovations themselves, but rather by innovation processes that involved little irrelevant disagreement and an attempt to integrate technology with strategy.

Rockart and Short (1989) argued that information technologies increase mutual dependencies across organizational functions, enabling more frequent and elaborate communications among disparate interests, and requiring personnel to interact more "seamlessly" in a retail industry analysis, Clomons and Row (1993) argued that new retail information technologies require stores to interact cooperatively with their own home offices and distribution centers, as well as with suppliers in her large -scale innovation study, Kanter (1984) concluded that the most effective innovators "reduce rencorous conflict and isolation between organizational units; create mechanisms for exchange of information and new ideas across organizational boundaries; ensure that multiple perspectives will be taken into account in decisions; and provide coherence and direction to the whole organization. In these team-oriented cooperative environments, innovation flourishes

Powell (1995) found that behavioural factors, such as open culture and chief executive office (CEO) commitment, explained significantly greater total quality management (TGM) performance variances than process factors (such as defect reduction) and traditional quality control methodologies. In describing linkages among information technology, strategy, and organizational infrastructures. Handerson and Venkatraman (1993) emphasized the role of the CEO commitment to the success of information technology, implementation. According to the authors, successful information

tachnology requires a top executive who acts as "business visionary" and "Prioritizer" clearly supporting and articulating the need for information technology, and communicating its functionality within the context of the organization's strategy, structure, and systems Neo's [1998] analysis produced a similar result, the author reporting that "management vision and support" differentiated successful from unsuccessful information technology implementers. The same notion arises in Quinn's [1979] concept of "top level risk taking support".

commitment enhances information technology auccess by making resources available for implementation, integrating information technology with business strategy and processes, and ensuring continuity in information technology investments over time (Kettinger et al., 1994). The evidence suggests that many CEOs find information technologies threatening, and that CEOs' verbalized commitments are frequently perceived at shallow, uninformed and unsupported by resource deployments (Kenter, 1984).

In a study of Information technology systems in 24 companies, Benjamin et al. (1984) found that "only a handful of companies domonstrated that managerial attention was focused on the potential impact of information technology. CEOs have well documented tendencies to perpetuate commitments to the status quo [Hambrick et al. 1993], and to develop successors who share their own repertoires and frames of reference (Smith and White, 1987). These CEO biases and rigidates may create inadequate or inconsistent. Information technology deployments, and combine with Information technology obsolescence to inhibit performance.

Rackoff et al (1985) concluded that IT should support competitive thrusts such as cost leadership, differentiation, innovation, growth, and external alliances. Acckart and Short (1989) argued that Information technology serve primarily to manage organizational interdependence i.e. to solve coordination problems among departments and strategic business units.

#### 2.1.2 Adoption of Information Technology

Toffler [1980] and Naisbitt [1995], were the first who observed the rapid pace of diffusion of information technology and, on this basis, forecasted the end of the need for cities. The basic idea is that cities lower the costs of transporting goods and charing ideas. Because the information technology, too, lowers the costs of transportation and of communication, it might replace some traditional functions of cities in a similar vein, Gilder [1995] pointed out that the internet should boost the

fortunes of small cross and rural areas more than those of larger cross. In short, internet users might reap some of the advantages offered in cross without having to locate there.

A targe body of literature studies consumers' and firms' adoption of the Internet. Work try authors such as Fairlie (2004), Aron and Burnstein (2003), Goolsbee and Klenow (2005), and Forman et. al. (2005) finds significant differences in adoption between demographic groups, pointing to lower penetration among minorities, low-income, lesser-educated and rural households. This is particularly true for the early years of Internet adoption.

This affect is attenuated by lower rates of computer ownership and a lower likelihood of residing in ereas with several, competing Internet access providers. Research that studies the adoption of specific Internet services such as online grocery retailing (Bell and Song (2004)), Internet car retailing (Morton, Zettelmeyer, and Silva-Risso (2001)), or online banking (Hitt and Frei (2002)) comes to similar conclusions.

Work by Goldfarb and Prince (2006) points to significant differences between the profile of consumers who initially adopt the Internet and those who subsequently use it intensively. Their results suggest that the likelihood of adoption of the Internet increases in income and education, but that usage conditional on adoption declines in income and education, even when correcting for the selection problem that low-income adoption likely have higher testes for usage than the average low-income household

The recent dotcom boam/ bust cycle, as equilibrium industry dynamics triggered by technology innovation, has been analyzed in various studies. When a major technology innovation arrives, a wave of new firms enters the market implementing the innovation for profits. However, if the innovation complements existing technology, some new entrants will later be forced out as more and more incumbent firms succeed in adopting the innovation. Such situation has revealed that the diffusion of Internet technology among traditional brick and mortar firms is indeed the driving force behind the rise and fall of dotcoms as well as the sustained growth of e-commerce (Wang, 2005).

## 2.2 Mobile Telephony

AT&T invented mobile telephony in 1947 Initially known as "radiophones", the technology developed from exchange based radio link systems to cellular networks during the 1980s Cellular networks were developed to allow users to move from one cell – and its geographical coverage limit – to another cell without a broak in the call,

as a result of which true mobile telephony was made possible. Mobile telephone technology has enabled relatively low network build-out costs and these have resulted in the repid growth of mobile telephony to the point where it is growing significantly faster than fixed telephony, both globally and in developing countries (UNCTAD, Information aconomy report, 2007)

The year 2001 may be seen as an interesting baseline year as already in 2002 mobile subscribers overtook fixed line subscribers worldwide (ITU, 2003). In 2005, the worldwide number of mobile phone subscribers passed the two billion mark, with Asia accounting for more than 40 per cent of them. Private research estimates that by the end of 2006 the number of global mobile phone subscribers was approximately 2.6 billion. In developed countries growth in the mobile phone industry come from the increased offer and use of innovative services, from SMS and affordable roaming to intermet access and music downloads (UNCTAD, Information economy report, 2007).

In 2002, UNCTAD's e-commerce and development report considered the growth of wireless communications and their role in increasing ICT use by business and consumers - frequently referred to as "m-commerce". A number of policy issues were discussed, including the liberalization of telecommunications markets, licensing new mobile operators, creating independent regulatory bodies that would establish a fair and competitive market for mobile services while supporting competible standards, and facilitating interconnection among mobile services providers. The discussion concluded that while e-commerce services are increasingly attractive as an entry point for using Information and communication technologies, either to order and purchase products and improve their livelihoods through better communication in their communication of mobile services that needed to be overcome.

In 2006, the UNCTADs information aconomy report observed that mobile communications were growing at a remarkable rate in developing countries, and that mobile telephony continued to be the only information and communication technology sector where developing countries were quickly catching up or even in some ways overtaking developed countries. Mobile connectivity sidestops some important obstacles to other types of connectivity, but most notably to those hampered by, among other things, cost and the remoteness of certain areas. In Africa, mobile phones have proved so successful that in many cases they have replaced fixed lines.

The state of the telecommunications industry in Africa is characterized by continued mobile growth with figures increasing between 50-60 percent. Indeed recent media reports claim that Africa accounts for the highest annual growth rate in mobile subscription where in 2007 alone, 65 million new subscribers were added bringing the total to more than 250 million. In terms of mobile penetration rates, Libya is over subscribed with over 100 percent penetration - at 104.9 percent there are more active units than people, closely followed by South Africa with 70 percent; Botswana with over 50 percent and Kenya with 35 percent (African Business, 2008a, p. 34).

Mobile telephony is the most important mode of telecommunications in developing countries. While internet access has become a reality for many businesses and public institutions, and for individuals with higher levels of education and income, for the vast majority of the low-income population, mobile telephony is likely to be the sole tool connecting them to the information society in the short to medium term (UNCTAD, Information economy report, 2007).

In developing countries, the potential impact of mobile telephones is quantitatively different from that in the developed world. For the developing world, mobiles have become an essential entry point into the information society. Mobile telephony is the created tool that creates business opportunities, enables efficient sharing of information and intelligence, and empowers households and communities to stay connected. That said, it is still mainly the booming urban communities that are best served by mobile providers in developing countries. Mobile telephones can be used to facilitate or even generate business since they provide an opportunity to check current market prices for agricultural and other commodities relevant to rural economies, and currency rates as well as to confirm payments, enquire about weather patterns, and more generally keep in touch with customers and stay informed about transport logistics (UNCTAD, Information economy report, 2007)

As recent studies on the use of mobile phones in South Africa show, the substitute for talecommunicated information would have been physical transport. Instead of a quick phone call, never mind Internet usage, determining selling or buying prices would require costly, time-consuming physical contacts and transport. Thus without talecommunications, the costs of information retrieval and of transacting in general would be high. Besides greater transaction costs, the range of supply would be much smaller, or for transactions across large distances, risks would be higher as prices and conditions of sale would not be known exactly [Rajagopal, 2007]

# 2 2.1 Mobile Phones Use Cases in Developing Countries.

Every day a new example of innovative and productive mobile telephony use in developing countries surfaces in the media. What is interesting about many of them is their focus on the economic realities of everyday life. What follows is a diverse selection of various activities that is by no means exhaustive but only illustrative of the possibilities that information and communication technologies create for economic development. Their common linkage is how mobile technology affects better information and financial flows that reduce market inefficiencies and improve the earnings of users and their communities (UNCTAD, Information economy report, 2007).

#### 2.2 1.1 Local Agricultural Content in Uganda

In Uganda the CELAC (Collecting and Exchanging Local Agricultural Content) project is helping farmers organize their production and distribution using information provided through mobile telephone technology. Under this scheme, farmers regularly receive and send vital information from their network and other networks affiliated to them. WOUGNET (Women of Liganda network) assists by translating information into local languages for farmers based in northern Uganda in the past farmers in rural Uganda relied heavily on agricultural extension workers for knowledge and support regarding their livestock or crops. Unfortunately, the experience was often not timely and frequently lacking. Community radios that would have helped to bridge the vacuum also suffered from coverage problems and did not provide possibilities for feeding back information into the network.

#### 2.2.1.2 Boosting Profits Using Mobile Telephones in South Africa

About a hundred rural African farmers from the Makuleke region in South Africa are experimenting with mobile technologies in order to access information about market conditions in Johannesburg. This reduces the need to travel and move inventory, with frequent and substantial waste and pilterage during the nine-hour "share taxi" voyage, and with little certainty as to sales and income. Using a virtual trading facility installed on mobile phones provided by the project sponsors, Vodacom, farmers can sell their produce directly from their small farms.

By checking prices in the Johannesburg markets by mobile telephone, farmers can avoid paying excessive commissions to intermedianes. At the same time they are able to negotiate from an improved position, fully aware of market and price conditions, and with a consequent reduction of the information divide between them and larger

Industrial farmers. With mobile telephone use growing rapidly, the exaggerated information asymmetries caused by rural isolation and poverty will, if not disappear, at least be substantially reduced

# 22.1.3 Mobile Telephone Services and Micro Finance in Kenya (Mpesa)

Microfinance is the provision of financial services to poor people. Micro-credit, Microsawngs, and micro-insurance are essential support services to enable poor people to trade and take part in the mainstream economy. Realizing the potential of mobile technology for extending financial services beyond urban areas. Vodafone/ Safaricom in 2003 initiated a pilot mobile-telephone-based project in Kenya. While the initial objective was to create efficiencies to reduce the cost of loan disbursement and recovery, the technology was found by users to be convenient for person-to-person transfers. Since early 2007 the project has been commercialized.

To implement this scheme, Vodafone/Safancom partnered with the Commercial Bank of Africa, Cribank, DFID-FDCF and the Faulu micro-finance company to dasign and test M-PESA micro payment platform. M-Pasa allows customers to use their mobile beliephones like a bank account and debit card. Customers credit their accounts with their prepaid time vendor and can, in addition to spending their credit on calls and messages, transfer funds to another subscriber, or make small or micro-payments for goods and services without the need for cash.

## 2.3 Information Technology in Banking

Advances in technologies have allowed service providers to incorporate many different technologies into the delivery of their services. These technologies have been implemented in the service encounter for the customer to use with varying degrees of success. The factors influencing consumer attitudes towards and adoption of self-service technologies (SSTs) across three different technologies used in the banking industry roveds that service attributes related to trust quality and time are major attribute influence attitudes toward each of these technologies and offers an explanation of the varying degrees of acceptance found among consumers (Curren and Mueter, 2005).

Information technology affects banking in two main ways. First, it may reduce costs by replacing paper-based, labour intensive methods with automated processes. Second, it may modify the ways in which consumers have access to bank's services and products and, hence, may enhance the contestability of markets, especially in retail banking. Due to deregulation and technological advances, new opportunities now become available.

but the skill needed to exploit them effectively may be unknown. Early entry of financial institutions into the technology expanding activities may have learning benefits that are manifested in discovery of the skill needed to operate effectively E-banking products and services are getting more and more advanced and increasing in variety by providing information at the early stage to providing transactional activities.

The maxims of technology spread in the operations of financial institutes may have relational effect with the size and volume of operations of the organization. Whenever the innovation is initially introduced, large banks have an advantage to adopt it first and enjoy further growth of size. Over time, as the innovation diffused into smaller banks, the aggregate bank size distribution increases stochastically towards a new steady state Applying the theory to a panel study of Internet banking diffusion across 50 US states it has been observed that technological, economic and institutional factors largely govern the transaction process supported with technology. The empirical findings disentangle the interrelationship between Internet banking adoption and growth of average bank size, and explain the variation of diffusion rates across peographic regions (Sullivan and Wang, 2005).

In reference to banking reforms in India, technology has been found to be the major input in driving competition, which has been evidenced in a study revealing a positive relationship between the levels of competition and banking efficiency. However, a negative relationship between the presence of foreign banks and banking efficiency is found, which attributes to a short run increase in costs due to the introduction of new banking technology by foreign banks (Ali and Hang, 2006)

Bank characteristics such as asset size, number of employees, number of full service locations, areas of lending, and return on assets largely influence the technology diffusion process and adaptation at the customer levels. It has been observed in a study that a number of bank composition and operations variables behaved statistically independent between size variables (assets, number of employees, and number of branches) and wide area network access. The survey data also indicate that return on assets and network system variables are independent. Therefore, networks systems have not had a direct impact on the bottom line (Zhu et al., 2004).

# 231 Electronic Banking Concept

The new information technology is becoming an important factor in the future development of financial services industry, and especially banking industry. The developments in information and communication technology have significantly contributed to the exponential growth and profit of the financial institutions worldwide. This evolution has transformed the way banks deliver their services, using technologies such as automated teller machines, phones, the Internet, credit cards and electronic cash However, banks face a number of important questions on strategies for deriving full advantage of new technology opportunities and tracking electronic development changes affecting interactions with the customers (Rajagopal, 2007).

For over a decade, information technologies have significantly affected the banking industry. Banks and other financial institutions have improved their functions as a financial intermediary through adopting various information technologies (Chang, 2002; Gourlay and Pentecost, 2002; Hannen & McDowell, 1984; Haynes & Thompson, 2000; VanHoosa, 2003). Generally, when the information technologies combine with functions of banks and financial institutions, it is called electronic banking. Electronic banking technologies have led banks and financial institutions to improve affectiveness of distribution channels through reducing the transaction cost and increasing the speed of service (Chang, 2002; VanHoosa, 2003). From the consumers' perspective, electronic banking technologies allow consumers easier access to financial services, lower bill paying, and time saving in managing their financial (Anguelov, Hilgert and Hogarth, 2004).

The e-banking services include e-remittances, a-payments, e-trades, and a credit However, many e-banking businesses have been forced out of market due to the low customer perception such as e-procurements supporting the banking transactions of large work tenders. Internet-based transactions require their own security measures for which private solutions may not be sufficient (De Young, 2001). However, e-banking develops automated credit authorization system by developing appropriate credit scoring system and cash-flow acoming system to reduce operating costs, improve asset quality, and increase client profitability. One of the major benefits of credit acoming system is that landers can make credit decisions without necessarily obtaining financial statement, credit reports, or other time consuming and hard-to-get information.

Retail banking increasingly roles on soil service technology applications to augment efficiency in rendering financial services to their customers and in such information

and communication technology environment, customers sys themselves at the convenience of these service options more than ever before. Banks in retailing their products try to create and sustain a competitive advantage by offening customer value based on the utilization of self service technology options, while customers try to receive the best value of their participation in service production and delivery [Anitsal and Flint, 2006]

Internet banking has advantages for banks to maintain competition, to save costs, to anhance mass customization, marketing and communication activities, and to maintain and attract consumers [Daniel and Storey, 1997; Mols, 2000, Read, 1998; Sheshunoff, 2000; and Tomkin and Baden-Fuller, 1998) The primary advantage of Internet banking is to save time and cost. Lee and Lee (2001) indicated that Internet banking allows consumers easier access to their bank accounts, lower service charges, and time saving Moreover, Chang (2002) showed that Internet banking had a low transaction cost and a high speed of service when compared to other banking services.

In general terms, increasing convenience is a way of raising consumers' surplus provided new technology is adopted by the banks in order to offer convenience to the customers that may be through an electronic transaction as a substitute for a trip to the branch. The technology-based services imply different combinations of accessibility attributes (time, distance, and search costs), ease of use and price. Another factor in determining the magnitude of the surplus that the bank can seize is the relative importance of cross selling. The bundle of services provided electronically is usually not the same as the one available at a branch. For this reason, new technology based banking services with high customer value may offer botter service conditions to harmonize the flow of information and services across the spatial and temporal dimensions (Rajagopal, 2007).

Banks greatly support this not only because they could meet their customers' need for convenience but also because of the enormous economic impacts in replacing a high-cost channel (bank clarks) through a low-cost channel (a central web server) for simple transactions, with the additional benefit of eliminating the necessity for a media conversion (Lustsik, 2003)

Financial transactions are probably the most important examples of transactions where no physical product is involved. Therefore, the impact of distance on e-banking about the apparent. However, exploiting the possibilities offered by e-banking also runs into limitations. For instance, some financial services might be not available on the web

and therefore a trip to the closest branch is necessary anyway. If this is the case, then consumption economies for one stop banking might totally discourage the use of the Internet (Berger et. al. 1996). On the other hand, information about families and small family business is thought to be soft or tacit, that is hard to communicate to others (Pataraen, 2004). As noted by Petersen and Rajan (2002), lending practices based on soft information require the lender to have personal contacts with the borrower in this case, a borrower from a given bank might want to stick with the same bank for the additional financial services she needs.

## 2.3.2 Banelits of Electronic Banking

From the Bank's point of view, the benefits for offening Internet banking services is better branding and better responsiveness to the market. Those banks that would offer such services would be perceived as leaders in technology implementation. Therefore, they would enjoy a better brand image. The other benefits are possible to measure in monetary terms. The main goal of every company is to maximize profits for its owners and banks are not any exception. Automated e-banking services offer a perfect opportunity for maximizing profits (Nathan, 1999; Pyun et al., 2002).

The main benefit from the bank customers' point of view is significant saving of time by the automation of banking services processing and introduction of an easy maintenance tools for managing customer's money. The main advantages of e-banking for corporate customers include Reduced costs in accessing and using the banking services, increased comfort and timesaving. Quick and continuous access to information, Convenience, Speed, Better cash management and Funds management. Customers can download their history of different accounts and do a 'what-if' analysis on their own Personal Computers before affecting any transaction on the web. This will lead to better funds management (Bank Away, 2001; Gurāu, 2002).

#### 2.3.2.1 Economic Banefits

The impact of the New Economy on the entire economic growth has been studied in several research projects. For exemple Pohjola (2002) shows, that the contribution of the use of information communication technology to growth of output in the Finnish market sector has increased from 0.3 percentage points in early 1990s to 0.7 points in late 1990s. However, unlike the US, there has been no acceleration in the trend rate of labour productivity in Finland. According to the recent research conducted in Estonia (Aarma, and Vensel, 2001), bank customers use bank office services on average 1.235 times per month, and wait in queue in bank office on average for 0.134 hours.

Simple calculation shows, that making payments via e-banking facilities (for instance using internet bank) rather than in the bank offices create overall economy savings in the amount of 0.93% of GDP

# 2.3.3 Key E-Banking Risks

Although the adoption of electronic finance and other e-services offers emerging economies an opportunity to leapfrog, it also carries potential risks. Most of the crimes that exploit the vulnerabilities inherent in these technologies are not new - fraud, thelt, impersonation, denial of service and related extortion demands have plagued the financial services industry for years. However, the widespread use of these technologies exposes users to crimes of greater dimensions in terms of depth and ecope (Glassianer, 2003)

Strategic risk is one of the most significant risks that e-banking activities present for banking organizations. Strategic risk differs from other risk categories in that it is more general and broad in nature Strategic decisions to be taken by a bank's senior management have implications for all other risk categories. Given growing customer acceptance and demand for e-banking, most banks will need to develop a stratagy to use the internet delivery channel to provide informational content and/or transactional service to customers. The rapid changes in technology, the pace of competition with other banks and non-bank competitors and the nature of that strategy could expose banks to substantial risk if the planning and implementation of the strategy is flawed or otherwise not well thought through [Basel Committee, 1998]. Spurred by competitive and peer pressures, banks may seek to introduce or expand e-banking without an adequate cost-benefit analysis. The organizational structure and resources may not have the skills to manage e-banking. Banks should respond to strategic risk by having a clear strategy driven from the top and should ensure that this strategy takes account of the effects of e-banking, wherever relevant Such a strategy should be clearly disseminated across the business, and supported by a clear business plan with an effective means of monitoring performance against it (Sergeant, 2000).

Schindler (2000), advance that E-banking involves several specific operational risks. One operational risk mainly relates to the security of systems and transactions, including data confidentiality and authentication of the parties involved. Another operational risk refers to the continuous availability of the Internet as a medium for financial transactions. To take full advantage of the potential benefits of e-banking services, systems should be available on a 24-hour basis. This availability is prone to senous hazards, such as computer viruses and hackers. Operational risk results from

retance on complex technology. Such risks can area not only when technology is developed in house but also when it is outsourced. The existence of increasingly complex arrangements between a financial institution and a chain of service providers created novel oversight problems. A significant number of banks offering e-banking services outsource related business functions, e.g. security, either for reasons of cost reduction or, as is often the case in this field, because they do not have the relevant expertise in house.

Outsourcing a significant function can create material risks by potentially reducing a bank's control over that function. One of the components of operational risk is the forecast of the potential customers' volume, which in the case of e-channels have proved difficult. [Schaechter, 2002] Many banks going online have significantly misjudged volumes. When a bank has inadequate systems to cope with demand, it may suffer reputational and financial demage, and even compromises in socurity if extra systems that are inadequately configured or tosted are brought online to deal with the capacity problems.

There is also a risk, which arises from legal and regulatory uncertainty in e-finance transactions referring in particular to the difficulty of identifying the headquarters of an e-finance firm. This is the risk to earnings or capital arising from violations of, or non-conformance with, laws, regulations and ethical standards. This risk is amplified when the customer, the bank and the transaction are in more than one country Banks angaging in e-banking can face legal risks with respect to customer disclosures and privacy protection. Customers who have not been adequately informed about their rights and obligations may bring suit against a bank Failure to provide adequate privacy protection may also subject a bank to regulatory sanctions in some countries [Basel Committee, 1998]

Banks choosing to enhance customer service by linking their Internet sites to other sites also can face legal risks. A hacker may use the linked site to defraud a bank customer, and the bank could face litigation from the customer. Because financial institutions use similar software programme, there is a systemic risk that many large institutions could be simultaneously subject to a common adverse shock. Moreover, the deeper involvement of greater numbers of new and different firms – including non-financial firms – in financial markets may make it much more difficult to monitor the links between the various actors and to assess the risks to which they are exposed. As the links between financial and non-financial markets become more pervasive, the sources of systemic risk are likely to become harder to identify [Crocket, 2001].

Security is considered the central operational risk of e-banking. Threats can come from single and outside the system. They include unauthorized access to the system through, for example, back doors, brute force, hijacking, shifting or spoofing to retrieve and use confidential consumer information, add customer assets, subtract customer liabilities or interrupt operations. Similarly, denial of service attacks and injecting a virus can disrupt services and affect integrity of information [Schaechter, 2002]. Security breaches essentially fall into three categories, breaches with serious criminal intent [e.g. fraud, theft of commercially sensitive or financial information], breaches by casual hackers (e.g. defacement of web sites or denial of service - causing web sites to crash) and flaws in systems design and/or set up leading to security breaches (e.g. genuine users seeing / being able to transact on other users accounts]. All of these threats have potentially sengus financial, legal and reputational implications (Sergeant, 2000).

According to the Dautscha Bank Research (2006), security concerns are the most important hurdle for many customers. Cheaper fees and the possibility to ask questions are not so essential compared to the expected level of security in e-banking E-banking, in particular internet banking can potentially be misused for money laundering because of the lack of face-to-face contact with customers [Schaechter, 2002]. Money foundering has been greatly facilitated by electronic banking because of the anonymity it affords once a customer opens an account, it is impossible for banks to identify whether the nominal account holder is conducting a transaction or even where the transaction is taking place.

Reputational risk is considerably heightened for banks using the Internet. The Internet allows for the rapid dissemination of information, which means that any incident, either good or bad, is common knowledge within a short space of time. Internet rumours can easily become self-fulfilling prophecies. The speed of the Internet considerably cuts the optimal response times for both banks and regulators to any incident. Banks must ensure their crisis management processes are able to cope with Internet related incidents (Sergeant, 2000).

Basel Committee (1998) indicates that reputational risk may arise when systems or products do not work as expected and cause widespread negative public reaction. A significant breach of security, whether as a result of external or internal attacks on a bank's system, can undermine public confidence in a bank. Reputational risk may also arise in cases where customers experience problems with a service, but have not been given adequate information about product use and problem resolution procedures.

Mistakes, malfeasance, and fraud by third parties may also expose a bank to reputational risk. Reputational risk can arise from significant problems with communications networks that impair customers' access to their funds or account information, particularly if there are no alternative means of account access

Substantial losses caused by mistakes of another institution offering the same or similar electronic banking products or service may cause a bank's customers to view its products or service with suspicion, even if the bank itself did not face the same problems. Reputational risk may also arise from targeted attacks on a bank. For example, a hocker ponotroting a bank's web site may alter it to intentionally apread inaccurate information about the bank or its products. Reputational risk may not only be significant for a single bank but also for the banking system as a whole if a globally active bank experienced important reputational damage concerning its electronic banking business, the security of other banks' systems may also be called into question. Under extreme circumstances, such a situation might lead to systemic disruptions in the banking system as a whole (Basel Committee, 1998)

Customer aducation on security risks and precautions can play an important role for consumer protection and for limiting reputational risk. Security risks can be heightened when a consumer does not understand the necessary security precautions and misuses them inadvertently. Banks should therefore provide prominent and easy-to understand advice to customers on the importance of security precautions and concerning personal privacy policies. This guidance should be understood before any e-banking services are activated [Schaechter, 2002].

#### 2.4 Mobile Banking Concept

Since users considered their mobile phone as a personal trusted device making it to an integral part of their lives and more and more of these devices became internet-enabled, the regular conclusion was the transformation of banking applications to mobile devices as the next step of electronic banking development.

For mobile banking, the advantages even go much further than for electronic banking: The high penetration of mobile phones reaches all social levels, mobile applications disband the limitations of electronic banking as they allow for a use anytime-enywhere and the subjective and objective security of the device is higher than that of a personal computer. The profit and loss account was also favourable. Taking the example of a German bank, a bank transaction via a clerk generates overall costs of 2 US-\$ while a mobile banking transaction gets along with 15 cents (Schilder, 2001).

markets and channel or increase customer retention. External growth is made possible through strategic alliances, joint ventures, integration, acquisitions and diversification

The adaptation and application of growth strategies is of great essence to firms: they assist managers to redefine the future, success and growth of organizations According to Mbaya (2001), top management decisions must focus on the future of the firm amidst competition and environmental turbulence. The benefits of growth strategies to organizations are abounding in the literature (Kotler, 2000; Johnson and Scholes, 2002). Ansoff's strategy matrix shows that growth strategies can help firms identify their future strategic direction, assist them in planning for growth assist them in formulating a strategy and knowing which markets and respective products to serve in the market for success and growth.

#### 2.5.1 Ansoff's Growth Stratogies

This marketing tool was first published in the Harvard Business Review in 1957, Ansoff's growth strategy matrix remains a popular tool for analyzing growth. It is a strategic grid that can help firms identify their future strategic direction, and is often used when firms are planning for growth Ansoff's Matrix categorizes four separate strategies, but importantly also emphasizes the degree of risk of each approach. To cortray alternative corporate growth strategies, Igor Ansoff presented a matrix that focused on the firm's present and potential products and markets (customers). By considering growth via existing products and new products, and in existing markets and new markets, four possible product-market combinations from Ansoff's matrix presents four main strategic choices. Market penetration, Market development, Product development and Diversification as shown in the diagram on appendix four.

#### 2.5.1.1 Market Penetration Strategy

Lancaster (1988) states that Market Penetration is a strategy of expanding sales based on existing products in existing markets. This is the strategy of penetrating more deeply into the same market. Essentially the same good or service is being promoted/pushed harder onto the same target customer group. This strategy is reliant on the fact that there is some untepped potential to increase sales in the same market. This may mean that customers can be persuaded to buy the product more regularly, switch from a competitor, or encourage customers in the target market who may not have yet started to buy the product to do so. In this cell, the products remain unchanged and no new customer segments are pursued instead, the company repositions the brand, leunches new promotions or otherwise these to gain market.

share and accordingly, increase revenue (Kotlar, 2000).

There is increased product availability and awareness by encouraging current customers to buy more per period, attracting competitor's customers, and/or convincing non-customers of their need to become customers. This strategy is easiest to pursue in the introduction and growth stages of an industry, as all competitors can grow together and the perceived level of rivalry is low. At the mature and decline stages, however, continued growth comes through taking a share from competitors [Kotlor, 2000].

Johnson and Scholes (2002) argue that this strategy is the least risky since it teverages many of the firm's existing resources and capabilities. In a growing market, amply maintaining market share will result in growth, and there may exist apportunities to increase market share if competitors reach capacity limits. The strategy also probably requires the least amount of finance for expansion, although resources may need to be channeled into promotional campaigns to appeal to and their persuade customers. This could be in the form of advertising, sponsorship, special promotions and even temporary price discounts.

Many of the mobile phone networks operated this philosophy at the end of the 1990's and early 2000 by offering extremely cheap (heavily subsidized) prepay mobile phones to penetrate deeper into their target markets, and achieve higher customer bases. Thus in the space of just a few years, domestic usors mobile phone ownership increased from under 10 million to over 40 million in the UK. It is interesting to note that as the mobile phone market reaches saturation, Market Penetration is no longer a viable strategic option. Market penetration has limits, and once the market approaches saturation another strategy must be pursued if the firm is to continue to grow (Kotlor, 2000) in this case emphasis is switching to product development, to tempt existing users to purchase upgraded handsets with more technologically advanced features.

Some factors the firm should take into account in the deliberations on whether to pursue this strategy are the growth of present market, strangth of composition, ability to increase volume of sales, ability of customers to consume of the product and more frequently and strength of brand awareness. According to Egan and Thomas (1998) brand building is one way of achieving greater penetration of existing markets with existing products. Brand building can be achieved by such means as improved quality, better communications and positioning, providing consistently high levels of brand exestment rather than making short-term cutbacks. The objective of this is to make

existing customers more brand-loyal (brand switching less often) and or make new customers in the same market begin to buy the brand. Higher penetration can be achieved by increasing brand usage through frequency or quantity. Where the total market is still growing, the strategy may be achieved for example through "natural" market growth. In markets that are static or declining, a market penetration strategy can be achieved only by increasing market share at the expense of competitors.

## 2 5.1 2 Market Development Strategy

According to Pearce and Robinson [2001], Market development consists of marketing present products to customers in related areas. These customers could represent untapped verticals, virgin geographic or other new opportunities. The company targets new geographic areas, domestically and internationally, identifying potential new customer groups, seeking additional distribution channels and developing new incations both domestic and abroad.

Doylo (1994) advanced that market development strategy consists of marketing present products, often with only cosmetic modifications to customers in related market areas by adding different channels of distribution or by changing the content of advertising or the promotional media. Several specific approaches are: Opening additional geographic markets (regional expansion, national expansion and international expansion), attracting other market segments (developing product versions to appeal to other segments, entering other channels of distribution and advertising on other media).

Market development involves the firm moving into new segments of the same market, or even into entirely new markets. Therefore, there is a greater degree of risk as the firm does not have the same understanding, knowledge and experience of the new segment/market. This suggests to some extent, that the firm is more vulnerable to making an inappropriate judgment that could damage profitability. The firm, therefore, needs to decide whether it is worthwhile targeting new markets. What the firm needs to consider is the ability to distribute to new geographical locations (towns, regions or countries), utilization of unused distribution channels, reasons why some consumers are not using the product and the different applications for the product that will attract new markets (Blackpool, 2002).

## 2 5.1.3 Product Development Strategy

According to Pearce and Robinson (2001), this Strategy involves marketing new products to existing customers. The company grows by innovating, gradually replacing old products with new ones; the firm develops potential new products based on customer wants and needs through new product technologies and developing different product quality levels. This strategy may be appropriate if the firm's strengths are related to its specific customers rather than to the specific product itself in this equation, it can loverage its strengths by developing a new product targeted to its existing customers. Similar to the case of new market development, new product development carries more risk than simply attempting to increase market share (Gultinan and Madden, 1997) Egan and Thomas (1998) stated that loyal customers are return customers and therefore are very valuable to the business. Many could be very receptive to now products produced by the business. The firm could investigate the ability to add new features to the product, possibility of expanding the graduct line and possibility of creating a new version. According to these authors growth can come through developing new products for existing markets. New products giving extra benefits based on new features can be the motor for increased sales and market share

Phompson and Strickland (2001) advance that when product life cycles are short- as with software or consumer electronics. Product development becomes an essential requirement of an organization's strategy. Product development involves substantial modification of existing products or creation of new but related stams that can be marketed to current customers through established channels. The product development strategy is often adopted either to prolong the life cycle of current products or take advantage of favorable reputation and brand name. The idea is to attract satisfied customers to new products as a result of their positive experience with the company's initial offering.

According to Doyle [1994], some of the many specific options available to business undertaking product development are developing new product features developing quality variations and developing additional models and sizes (product proliferation). Since product development involves selling additional products to current customers, examples include saleds at Pizza Hut, software and laser printers from Apple Computer, tax planning and management consulting from auditing firms and amplifiers from Fender Guitar Company Whereas market development requires marketing and selling skills, product development requires technical, research and development skills.

An elternative approach to new products for current customers is to use licensing agreements with other firms to provide their products under one's brand, such as IRM's Canon-produced printers. This requires strategic alliance skills.

# 2.5.1.4 Diversification Strategy

Johnson and Scholes (2002) define Diversification as a strategy, which takes the organization away from its current market or product or competencies. Adapting this strategy entails taking the greatest risk; here, the company markets new products to new customers. There are two types of diversification; related and unrelated. In related diversification, the company enters a related market or industry. In unrelated diversification the company enters a market or industry in which it has no relevant expanence. Strategy in diversification growth opportunities is strategy to identify opportunities that would add attractive businesses that are unrelated to the company's current business and the pursuit or the acquisition of additional brands to broaden product offening. Gultinan and Madden (1997) add that diversification strategy involves the development of new products for new markets and consequently is the most risky of the four options.

According to Doyle [1994], it is the most risky of the four growth strategies since it requires both product and market development and may be outside the core competencies of the firm. In fact, this quadrant of the matrix has been referred to by some people as the "suicide cell". However, diversification may be a reasonable choice if the high risk is compensated by the chance of a high rate of return. Other advantages of diversification include the potential to gain, a foothold in an attractive industry and reduction of overall business portfolio risk. Whether the firm promotes this strategy will depend on the situation of the market, the business' cash reserves and the skills of staff to take on new product lines. Kotler (2000) state that diversification growth makes sense when good opportunities can be found outside the present. A good opportunity is one in which the industry is highly attractive and the company has the mix of business strengths to be successful.

Lancaster and Massingham (1988) postulated that diversification could take a number of forms, for example a company might choose to diversify into new products markets by moving through the channel of production and distribution. Atternatively, the diversification may be into an entirely unrelated form of business activity Different routes can achieve diversification internally, by the firm developing a new activity or externally, by the firm acquiring another firm whose activities are distinctive from its existing activity internal diversification may involve the firm using its technological

expertise to develop products, which take it into new areas of activity, such as ICI in chemicals and plastics. Or it could involve a firm exploiting its "brand name" to enter new activities as when Marks and Spancer moved into financial services. Diversification may also involve internationalization; so many diversified firms are also international in acops (Schulz, 1999).

Related diversification is strategy development beyond current products and markets, but within the value system or 'industry' in which the company operates For example. Unilever is a diversified corporation, but virtually all of its interests are in the fast-moving consumer goods industry. Under related diversification there is vertical integration that describes either backward or forward integration into adjacent activities, which are concerned with the inputs into the company's current business. For example, raw materials, machinery and labor are all important inputs into a manufacturing company, so the acquisition by a car manufacturer of a component manufacturer would be related diversification through backward integration Forward integration refers to development into activities that are concerned with a company's outputs, such as transport, distribution, repairs and servicing [Johnson and Scholes, 2002]

According to Thompson and Strickland (2001), horizontal integration, which is also a related diversification, deals with development into activities that are competitive with or complementary to, a company's present activities. For example, many organizations have realized that there are opportunities in other markets for the exploitation of the organization's competences-perhaps to deplace the current providers as a new entrant. For example, the Automobile Association (AA) had been founded club for motorists in the UK and extended into providing rescue services for breakdowns. As this market came under fierce attack from specialist breakdown organizations in the 1990s, the AA extended into new markets by exploiting its expertise in rapid response to crisis.

According to Kotlar (2000). Unrelated Diversification also referred to as Conglomerate is diversifying into a completely different industry Example: The snow ski firm acquires a firm that designs and makes women's evening gowns. Occasionally a firm, particularly a very large one plans to acquire a business because it represents the most promising invastment opportunity available. The principal and often sole concern of the acquiring firm is profit pattern of the venture. There is little concern given to creating product,/ market synergy with existing business (Pearce and Robinson, 2001)

Studies of big business in many countries suggest that there was an increasing trend towards diversified firms from the 1950's onwards. The typical large firms, nowadays, are therefore diversified, although some are a lot more diversified than others. During the 1980s, according to Schulz (1999), the fashion for diversification slowed down somewhat and some diversified firms went into reverse and began to divest themselves of some of their activities. This trend was called "getting back to basics", concentrating on the core, and more graphically, "sticking to the knitting." These trends, first to greater diversity, and later away from diversification, were closely related to changes in acquisition activity in the US and the UK

There is no shortage of reasons available for firm diversification. Many authors give long lists of "reasons" which purport to "explain" diversification. Whiteley [1997] illustrates a good example of the genre it rounds up and describes all the usual suspects for diversification. These include risk reduction, parnings stability, synargy, growth, adapting to customer needs, and the use of "spare" resources. Asking whether extending the scope of the firm add value we are led to focus on the ability of the firm to achieve either higher prices or lower costs as a result of such a stratogy. How might extending the scope of the firm enable it to benefit from higher prices or lower costs? There are some arguments about the possibility of firms extending the exercise of their market power in one area to another area through diversifying but these are not very convincing [Schulz 1999].

### 2.6 Commercial Bank Growth Measures

Paula (2002) advance that the decision to achieve product line expansion, through acquistion or new entry will depend on several factors, such as the nature of the new business and start-up costs involved, in terms of initial capital, technology platform, and distribution requirements. To acquire an existing bank has some advantages. First, start-up costs are in general lower, since the terget company has already made infrastructure investment. Second, the existing firm may have a valuable asset, such as brand recognition, beyond the acquirer's existing customers. If this occurs a firm provides instant credibility and access to the market. Third, the customers' base can be leveraged at the same time that cross selling of other products and services can occur using the same distribution base for this purpose.

DeYoung and Hunter [2002] posits that at some point in the near future, the bank merger wave will finally subside. When it is finished the market structure of the banking industry will no longer reflect the historical restrictions on geographic and product market mobility. At that point, the banking industry will more closely resemble.

non-banking industries in an important strategic dimension; growth by internal espension will become a viable strategic alternative for banks, because in the new industry equilibrium there will be fewer easy opportunities to grow by acquisition. Under these more "normal" industry conditions, the Internet will play an expanded and more complicated strategic role Internal growth strategies typically require increased advertising and marketing expenditures, and this is an area where deep-pocketed large banks have a clear advantage over small community banks. When large banks exhaust their opportunities to grow via inexpensive acquisitions, their strategic growth objective will ewitch from wholesale acquisition of other banks to the acquisition of individual customers of other banks. Large banks will have two sources of customers. At one extreme the large banks will compete for each other's customers in a land of zero sum game, consuming any cost or productivity gains by reducing prices. In this scenario large banks remain mired in the southwest corner of the strategy space, selling commodity-like services at low margins and relying on innovation and increased scale to drive down unit costs. Community banks will have uncontested access to the highly prolitable southeast corner, although they may or may not be able to occupy it. At the other extreme the large banks will compute for the customers of the community banks, perhaps using the informational potential of the Internet to target high-value community bank customers, and offering them customized or semi customized financial services at relatively low prices in this scenario large banks will migrate towards the more profitable southeast corner of the strotegy space, and the market share of community banks will shrink

Sentomero and Eckles (2000), and Berger et al (2000), discuss the benefit of economies of scale and scope as related to the increased cost efficiency. The basic idea is that the emergence of broad financial firms enables costs to be lowered, if scale or scope economies are relevant and if the range of expansion is within the band whereby they can be achieved if economies of scale and scope prevail, increased size will help create systemic financial efficiency and shareholder value to the firm. However, if diseconomies prevail, both will be destroyed. Sentomero and Eckles (2000) stress that the roal gain of multi-product distribution may not be in production efficiencies but in customer service, in what they denominate "consumption economy". It derives from the cross selling potential of a financial firm that produces various products and services (banking, insurance, and asset management). The result will be higher revenue and a better return from any customer segment, if consumers of financial services find it more advantageous to purchase multiple products from the

same provider. Consequently, banks can increase their profits without any significant anhancements in their operational efficiency

An argument in favor of big universal banks is that their potential for greater innovation is bigger than that of small banks. According to Schumpeter's approach, the innovator-firm can get transitory monopolist earnings derived from some successful innovation. The introduction of new innovations — both technological and managerial — when successful may permit a firm to increase both its earnings and market share. In this sense, technological change is one of the main drivers of the expansion strategy of firms. Studies of banking efficiency seems to ome this important aspect of the discussion on banking efficiency and performance, as they put too much emphasis on a firm cost structure. Financial innovation can be essential to a financial firm to obtain both increases in its revenue gains and in market share, since it allows a bank to increase the customers' deposits amount in order to finance its essets operations [Minsky, 1988].

Empirically, some authors have found aignificant disparties in cost structures among banks of similar size, suggesting that the ways in which banks are run can be more important than their size or the range of business that they pursue in other words, management efficiency per so may be a more important factor than scale economies in bank performance. This may suggest that any shareholder value gains in many of the financial services mergers in the 1990s were more highly associated with increases in production and management efficiency than scale and scope economies (Walter, 1999 and Molynaux, 2000)

### 2.7 Mobile Telephones and Business Growth

Hausman (2002) suggests that mobile telecommunications services create very large gains in consumer welfare. Acchamub et al. (2002) consider that there is an important bidirectional relationship between growth in the telecommunication sector and economic development. Thompson and Garbasz (2007) found that countries with less developed ICT use, and therefore emerging mobile services markets, might experience stronger feedback of growth in mobile ICT use into general economic growth. Keck et al., (2006) analyzed the relationship between mobile use and growth in African member countries of the WTO, and suggests that increasing access to mobile networks by 1 percent, may translate into a 0.5 percent increase in real GDP per capita.

With M-banking, every agent, that is: customer, enterprise and bank personnel alike, becomes a user as well as an information/knowledge source to the service suppliers and to the customers - This is, simply put, because so many banking information, knowledge and transaction capabilities resources are brought into the hands of any such agent anytime and anywhere - Thus cooperation and control/audit modes and miles must be redefined between bank customers, banks and third parties

- 2.7.1 Mobile Operators as Banks With an average 35-65 % (culture and also country dependent) of all mobile generic pervices being prepaid to the operator over periods of several months to their own offices or via a payment agent [not only banks], aren't mobile operators short-term deposit banks holding at any time double digit Billions? Going beyond collection of receivables from their own customers alone, to what extent should operators carry out simple payment processing functions traditionally carried out by banks between their customers and between their customers and third parties? For example, for some mobile operators whose ownership include public utility companies, such third parties could be water, power and cable TV bills Furthermore, with mobile operator's capability to handle efficiently and in real-time payments like tickets, parking, and their ability in handling bundled service definitions, aron't they micro payment agents? In addition, in terms of cross-subaidization, are those micro payment services paid by the generic or value-added communication services?
- 2.7.2 Banks as MVNO's: When banks "influence" or take over mobile operators via ownership structures, why shouldn't they become mobile virtual operators to capture the operator's client base and their cash transactions covering mobile communication services, but also for other payments enabled via the same transmission and transactions infrastructure? A third party (bank subsidiary, transactions payment cooperative) can act as an aggregator, reducing the payment processing and network traffic generated by small-payment users, but adding this party reduces revenue and fee sharing between the bank and owner of the transmission infrastructure in a way, mobile reaming operators can be looked upon as actually payment clearing systems, even if historically even the banking shareholders failed to see this.

#### CHAPTER 3

### RESEARCH METHODOLOGY

## 3.1 Research Design

The proposed research design for this study was an exploratory survey of the perception on the effect of mobile telephony on banking business growth. Unlike in experimental design where elements of study are usually in controlled environments, the survey was advantageous in this case since the elements under study cannot be put in a controlled environment for them to be studied. This type of survey is recommended for studies carried out at once and representing one point in time [Cooper and Emery, 1995]. The survey is preferred to a case study that would call for observations of characteristics of individual banking units.

### 3,2 Population

The targeted population was all registered Commercial banks operating in Kenya as listed in the financial institutions directory (Appendix III) obtained from the central bank of Kenya as at May 2009. The proposed population of forty-five banks was small enough to accommodate a census study and give a clearer picture of the findings that can be subsequently be used to arrive at justified generalizations on the findings from the study.

### 3.3 Sampling

No sampling was done, as a census of all the commercial banks operating in Kenya was considered. The proposed population of forty-five commercial banks was small enough to accommodate a census study and give a clearer picture of the findings that could be subsequently used to arrive at justified generalizations on the findings from the study.

### 3.4 Data Collection

Primary data collection was used to gather information from the target respondents outlining issues relevant to the study. This was achieved by use of self-administered questionnaires (Appendix I). The detailed Questionnaires were constructed using open – anded, closed – ended, and likert scale type of questions. Questions contained in the questionnaire were in different sections to simplify the work of the respondents as well as for classification purposes.

The questionnaires were self administered to product development and information technology functions of the forty-four banks using face to face interviews. The target

respondents were Business development managers, product development officers, information and communication managers or any other bank officials charged with product development and e-banking implementation responsibilities. This cluster of respondents was in all cases familiar with the M-Banking propositions of the various banks because it is their deily responsibility.

Secondary information was gathered through desk research on review of bank's product policy documents, brochures, banks and mobile service providers' tariffs and relevant literature from the University libraries. These were for additional insight on banking processes, policies, infrastructure and procedures.

### 3.5 Data Analysis

The research was set to determine how commercial banks perceive the influence of mobile phones on growth of banking business in Kenya. Data was entered using a worksheet. Data cleaning was undertaken to ensure that all questions are filled and done so correctly. It also included consistency check to ensure that instructions are followed especially for routing questions.

Since the study was descriptive in nature, the researcher used descriptive statistics such as mean, percentages, standard deviations and tabulations to collate the frequency of the responses in part B. The commercial banks were grouped as large, medium and small as per the Commercial Bank's directory from the central bank. Further classifications were developed on commercial bank ownership and length of time in the market. Likert item responses in Part C were analyzed separately in a Likert scale Likert scale reduces the level of subjectivity employed and enables the use of quantitative analysis. Likert item responses were colleted into bar charts, central tendency summarized by the mode and depension summarized by the range across quartiles.

### **CHAPTER FOUR**

### DATA ANALYSIS AND FINDINGS

### 4 1 Introduction

The objective of this study was to determine how commercial banks perceive the influence of mobile phones on growth of commercial banking business in Kenya. The study was conducted on all the forty-five commercial banks in Kenya. The proposed population of forty-five banks was small enough to accommodate a census study. This was considered adequate for the objectives of this study. In this chapter the analyzed data is presented together with the relevant interpretations. Findings have been presented in three parts. General information on the respondents. Mobile banking and business strategies and how commercial banks perceive the influence of mobile phones on growth of commercial banking business in Kenya.

### 4.2 Commercial Bank Characteristics

The objective here was to determine ownership of the forty-five banks classified broadly as Government, Private and Foreign.

### 421 Bank Classification

Table 1: Bank Classification

Bank size	Frequency	Percent	
Government owned domestic bank	8	18	
Privately owned domestic bank	30	87	
Foreign Owned Private bank	7	15	
Total	45	100	

Source: Research data

From Table 1 it is evident that 8 out of 45 Commercial Banks an equivalent of [18%] are Government owned domestic banks, while 30 (67%) are privately owned domestic banks. On the other hand 7 out of 45 commercial Banks an equivalent of 15% were found to be foreign owned private Banks.

### 4.2.2 Private Bank Origin

Table 2: Private Bank Origin

Origin	Frequency	Percent	
African	20	44	
Asion	15	33	
American	5	115	
European	5	115	
Total	45	100	

Source Research data

Majority of the commercial banks are of African origin as evidently shown from the table above. The scores were as follows: 20 (44%) of the commercial Banks were found to be of African origin, 15 out of 45 commercial banks an equivalent of 33% were found to be of Asian origin. While 11.5% of the commercial banks were of both American and European origin.

### 4.2.3 Banks Period Of Existence In The Market

Table 3: Banks Period Of Existence In The Market.

Years of operation	Frequency	Percent 9	
Loss than 5 years	4		
5-15 years	10	55	
16 30 years	18	40	
31-50	8	17	
Over 50 years	5	11	
Total	45	100	

Source: Research data

Table 3 indicates that majority of the commercial Sanks have been in operation for between 16 and 30 years an equivalent of 40% as shown on the above table. Other accres were as follows: Less than 5 years 9%, between 5-15 years (22%), between 31-50 years (17%) and finally over 50 years in operation at 11%.

### 4 2.4 Banka' Branch Network

Table 4: Banks' Branch Network

Number of branches	Frequency	Percent		
Less than 5	6			
5-15	5	11		
16-30	50	44		
31 50	9	15		
Over 50	5	11		
Total	45	100		

Source Research date

Table 4 reveales that 6 out of 45 commercial banks in Kenya had less than 5 branches an equivalent of 13%, 5 out o f 45 branches (11%) had between 5-15 branches, 20 (44%) had between 16 and 30 branches, There were only 9 commercial banks which had between 31-50 braches On the other hand, only 5 banks had over 50 branches as clearly indicated from Table 4

### 4.2 5 What Is Your Branch Network Distribution?

Table 5: What Is Your Branch Natwork Distribution?

Network distribution	Frequency	Percent
Widii goographical distribution	5	11
Sparae geographical distribution	5	11
Concentrated in major urban	35	78
Total	45	100

Source. Assignment date

The accrea were as follows, 5 out of 45 [11%] commercial banks indicated that they had wide geographical distribution, 5 [11%] indicated sparse geographical distribution while 35 commercial banks an equivalent of 77% indicated that they are concentrated in major cities and major urban areas

### 4.2.6 Banks' Branch Expansion

Table 6: Banks' Branch Expansion

Branches opened	Frequency	Percent		
Less than 5	7	16		
5 15	20	44		
16-30	10	55		
30-50	5	11		
Over 50	3	7		
Total	45	100		

Source Research date

The scores on the number of branches opened in the last five years were as follows. less than 5 branches (7 out 45) commercial banks an equivalent of 16%, between 5-15 branches (20 out of 45 commercial banks), 22% indicated that they have only opened 16-30 branches in the last 5 years, while only 5 indicated that they have opened between 30 and 50 branches Lastly only 3 out of 45 commercial banks indicated that they have opened more than 50 branches an equivalent of 7%

### 4.2.7 Customer Portfolio Size

Table 7: Customer Portfolio Size

	Frequency	Percent
Loss than 100 000	4	9
100,001 - 500,000 customers	29	64
500,001 - 1.000.000 customers	5	11
Over 1,000,000 customers	7	15
Total	45	100

Source: Research data

Results on and year customer base for the respective commercial banks revealed the following: Less than 100,000 (4 out of 45) an equivalent of 9%. Between 100,001-500,000 customers (29 commercial banks) an equivalent of 64%, between 500,001-1000,000 [5] an equivalent of 11%, and lastly seven [7] commercial banks indicated that they had over 1000,000 customers as their end year customer base. This was an equivalent of 15%.

### 4.3 Mobile Banking and Business Strategies

# 4.3.1 Does Your Bank Offer Any Services Through the Mobile Phones of Customers?

Table 8: Does Your Bank Offer Any Services Through The Mobile Phones of Customers?

	Frequency	Percent	
YES	29	65	
NO	16	35	
Total	45	100	

Source, Research date

Results on the whether the commercial banks offer any services through the mobile phones of Customers showed that 29 out of 45 commercial banks (65%) offer services through the mobile phones of customers while 35% of them indicated that they don't. The findings imply that majority of the commercial banks do offer services through the customers' mobile phones.

### 4.3.2 If Yes as Above, for What Purposes?

Tebla 9: If Yes as Above, for What Purposes?

	Fr	36	Mean	Std. Deviation
Request of account balances	25	55	420	0.96
Control of account movements	12	24	327	172
Instant payments	4	9	3.10	0 59
Administration of the account	6	15	2 04	1 53
Total	45	100		

#### Source. Research deta

Results on what purposes the commercial banks use mobile services for were as follows: request of account scored 55% with a mean of 4.20. The standard deviation was 0.96 implying that there was no significant variation on the responses Control of account movements was at 24% with a mean of 3.27 and a standard deviation of 1.72 implying that there were variations in the responses. Results on administration of the accounts and instant payments scored 15% and 9% respectively implying that they were the least utilized purposes of mobile services by commercial banks.

## 4.3.3 The Extent to Which Each of the Following is Important to Your Bank

Table 10: The Extent to Which Each of The Following is Important to Your Bank

	Mean	Btd
Encourage customers to transact through mobile phones as convenient	427	0.72
Educate customers about benefits of using mobile banking more often	387	1.59
Give discounts for more usage	2 04	1,81
Reward frequent users of mobile banking Services	2 04	1.81
Give privileges to frequent users of Mobile banking services	2 04	1.81
Give discounts for more usage	1 26	1 69
Maintain high quality of Services	4 80	0.53
Use of mobile devices as a customer feedback System	3 09	1 30
Educate customers about various uses of mobile devices in banking	3 03	1 60
Promote different uses of mobile devices banking Introduce differential taniffs based on level of adoption of mobile banking	398	0.95
Introduce differential tanifs based on level of adoption of mobile banking	2 68	1 28

### Source Research data

The findings from Table 10 clearly indicates that the respondents ranked the factors in order of importance as follows: Maintain high quality of Services with a mean of 4 80 (very large extent). Encourage customers to transact through mobile phones as

convenient at 4.27 implying very large extent, Educate customers about benefits of using mobile banking more often 3.87 (Large extent). Give discounts for more usage at 1.26 implying no extent, Use of mobile devices as a customer feedback System with a mean of 3.09 implying moderate extent. Educate customers about various uses of mobile devices in banking at 3.03 (moderate extent). Promote different uses of mobile devices banking introduce differential tariffs based on level of adoption of mobile banking with a mean of 3.98 implying large extent and introduce differential tariffs based on level of adoption of mobile banking at 2.68 implying small extent. Most of the standard deviations were greater than one implying that there were significant variations in the responses

### 4.3.4 The Extent to Which Your Bank Uses Market Development Growth Strategy

Table 11: The Extent to Which Your Bank Uses Market Development Growth Strategy

	Mean	Std Deviation
Target a new Mobile banking customer segment	427	0.72
Open new geographical branches nationally Aided by mobile technology	321	124
Open new geographical branches regionally Aided by mobile technology	2 80	1 59
Open new geographical branches internationally aided by mobile technology	1.04	0.81
Seek additional information technology distribution channels	2 04	1.81

Source Research data

The findings on market development growth strategy ranked as follows; Target a new Mobile banking customer segment 4.27 (very large extent). Open new geographical branches nationally Aided by mobile technology 3.21 (moderate extent). Open new geographical branches regionally Aided by mobile technology 2.80 (small extent). Sook additional information technology distribution channels 2.04 (small extent) and lastly Open new geographical branches internationally aided by mobile technology with a mean score of 1.04 implying no extent. There were no significant variations on the responses as shown by the standard deviations.

# 4.3.5 The Extent to Which Your Bank Uses Product Development Growth Strategy

Table 12: The Extent to Which Your Bank Uses Product Development Growth Strategy

	Mean	Std Deviation
Target a new Mobile banking customer segment	4 50	0.72
Open new geographical branches nationally Aided by mobile technology	4 00	024
Open new geographical branches regionally Aided by mobile technology	4.45	0.59
Open new geographical branches Internationally aided by mobile technology	4 45	0.81
Soek additional information tachnology distribution channels	400	1.81

### Source: Research date

Results on product development strategy were as follows: Target a new Mobile banking customer segment 4.50 (very large extent, Open new geographical branches nationally Aided by mobile technology 4.00 (Large extent). Open new geographical branches Internationally aided by mobile technology with a mean of 4.45 (very large extent). Open new geographical branches Internationally aided by mobile technology 3.96 (large extent) and finally Seek additional information technology distribution channels at 4.00 (large extent). It can be deduced from the standard deviations that there were no significant variations in the responses.

# 4.3.6 The Extent to Which Your Bank Uses Diversification Growth Strategy

Table 13: The Extent to Which Your Bank Uses Diversification Growth Strategy

	Maan	Std. Deviation
Carrying out another business related to the Current banking business	4 50	0.72
Carrying out business unrelated to the Current banking business	1.25	0.24

### Source Research date

From Table 13 is evident that as far as diversification growth strategy is concerned, commercial banks indicated that they carry out other business related activities to the current banking business. This was shown in the results as follows; Carrying out another business related to the Current banking business 4.50 (very large extent) and Carrying out business unrelated to the Current banking business at 1.25 (no extent). There were no significant variations in the responses given by the respondents.

### 4.4 Bank Management Perception

# 4.4.1 The Extent to Which The Bank Executive Management Perceive the Attributes of Mobile Banking in Business Expansion

Table 14: The Extent to Which the Bank Executive Management Perceive the Attributes of Mobile Banking in Business Expansion

	Mean	9td. Deviation
Anywhere banking	3 89	0.72
Anyume banking	3 97	0.24
Anything banking	5.90	1.59
Transcends geographical boundaries	3 79	091
Easy to access	3 90	0.81
Secure means of service	5.30	0.67
Reduces costs	3 90	0.60
Direct customer control of account movements	2 48	0.80
Greater processing speed	3 45	1 39
Accuracy	235	1.26
Convenience	4.00	0.90
Real time service	3.70	1 25
User interface	3 99	0.89
Mass market delivery mechanism	3 90	0.50

Source Research data

The findings on the extent to which the bank executives' management perceive the attributes of mobile banking in business expansion were as follows: Anywhere banking 3 89 (large extent). Anytime banking at 3 97 (large extent). Anything banking at 2.90 (small extent). Transcends geographical boundanes at 3.79 (large extent). Easy to access at 3.90 (large extent). Secure means of service at 2.30 (small extent). Reduces costs at 3.90 (large extent). Direct customer control of account movements at 2.46 (small extent). Greater processing speed at 3.45 (moderate extent). Accuracy at 2.35 (small extent). Convenience at 4.00 (large extent), Real time service at 3.70 (large extent), User interface 3.99 (large extent) and Mass market delivery mechanism at 3.90 implying large extent. The standard deviation showed that there were no significant variations in the responses as far as the perception of the executives towards the attributes of mobile banking in business expansion is concerned

# 4.4.2 How Does Your Bank Management Consider the Following Attributes in Banking Business?

Table 15: How the Bank Management Consider the Following Attributes in Banking Business?

	Moan	Std. Deviation
How to communicate with customers	4 58	0.72
How customers Communicate with you	4.50	024
Leadership in customer service	4.70	1 59
Technology leadership	3.00	181
Market Share leadership	2 89	0.81
Banking products leadership	4 00	0.67
Cost affective service delivery	3 90	0.60
Efficiency in service delivery	424	0.90
Innovation in service delivery	3 60	039

Source: Research data

The findings on how the bank management consider the following attributes in banking business were as follows: How to communicate with customers at 4.58 (very large extent), How customers Communicate with you 4.50 (very large extent), Leadership in customer service at 4.70. (very large extent), Technology leadership at 3.00 [modorate extent], Market Share leadership at 2.89 (small extent), Banking products leadership at 4.00 (large extent), Cost effective service delivery at 3.90 (large extent), Efficiency in service delivery at 4.24 (large extent), Innovation in service delivery at 3.60 [large extent). The standard deviation showed that there were no significant variations.

# 4.4.3 Has Your Bank Introduced an Application of Self Service Technologies [Sata]?

Table 16: Has Your Bank Introduced an Application of Self Service Technologies [SSTs]?

	Frequency	Percent
YES	45	100
NO	0	0
Total	45	100

Source Research data

Results on the whether the commercial banks have introduced an application for self service technologies (SSTs) showed that 45 out of 45 commercial banks (100%) self service technologies.

## 4.4.4 If Yes as Above, How are the Following Services Used in Your Bank?

Table 17: If Yes as Above, How are the Following Services Used in Your Bank?

	Mean	Std. Deviation		
Automated Teller Machine [ATM]	4 80	0.72		
Internet banking	350	024		
Electronic banking	4 4 5	059		
Mobile banking	3 90	081		

Source: Research data

From Table 17 the results are as follows: Automated Taller Machina (ATM) 480 (very large extent, Internet banking 350 (moderate extent). Electronic banking 445 (very large extent). Mobile banking 3.90 (large extent), it can be deduced from the standard deviations that there were no significant variations in the responses.

# 4.4.5? How are the Following Benefits of the Self Service Technologies (Sets) Regarded by Your Bank?

Table 18: How are the Following Bonofits of the Self Service Technologies (Sets) Regarded by Your Bank?

	Mean	Std Deviation
Cost reduction	258	0.52
Prolit Maximization	4.50	0.40
Better bank branding	3 00	1.59
Time saving	3 70	1.81
Convenience	1 390	081
Increased customer comfort	3 39	067
Quick and continuous access to Information		
	3 90	0.60

Source Research data

Results on how the benefits of the self service technologies been regarded by the commercial banks were as follows: Cost reduction at a mean score of 2.58 (least important), Profit Maximization 4.50 (very important), Better bank branding at 3.00 (important), important). Time saving at 3.70 (important), Convenience at 3.90 (important), Increased customer comfort at 3.39 [moderately important], liarge extent) and Quick and continuous access to Information at 3.90 (important The standard deviation showed that there were no significant variations in the responses

# 4.4.6 How are the Following Benefits of Mobile Banking Regarded by Your Bank?

Table 19: How are the following benefits of mobile banking regarded by your bank?

	Mean	Std. Deviation
Cost reduction	1.58	1 52
Profit Maximization	3 50	140
Sotter bank branding	3 00	159
Time saving	370	181
Convenience	3 90	181
Increased customer comfort	3.39	067
Quick and continuous access to Information		
	3 90	060

#### Source: Research date

Results on how the benefits of the mobile banking as regarded by the commercial banks were as follows: Cost reduction at a mean score of 1.58 (least important), Profit Maximization 3.50 (important). Better bank bronding at 3.00 (moderately important). Time saving at 3.70 (important), Convenience at 3.90 (important), Increased customer comfort at 3.39 (moderately important), (large extent) and Quick and continuous access to Information at 3.90 (important). The standard deviation showed that there were significant variations in the responses given that the standard deviations were greater than one in most of scores.

### **CHAPTER 5**

### DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Introduction

The objective of this study was to determine how commercial banks perceive the influence of mobile phones on growth of commercial banking business in Kenya. This chapter gives a summary of the discussions, conclusions and recommendations drawn after analyzing deta

### 5.2 Discussions

Results on the whether the commercial banks offer any services through the mobile phones of Customers showed commercial banks offer services through the mobile phones services. The findings imply that majority of the commercial banks do offer services through the customers' mobile phones.

The findings on the purposes the commercial banks use mobile services for imply that commercial banks use mobile services mostly for accounts request. On the other hand commercial banks use mobile services for administration of accounts and instant payments to a very small extent.

Results on how the commercial banks rank the factors that they deem important to effective operations revealed that Maintaining high quality of Services. Encouraging customers to transact through mobile phones as convenient and educating customers about benefits of using mobile banking more often. From the findings it may also be deduced that commercial banks do not regard introducing different tariffs based on the level of adoption of mobile banking as an important factor to the bank operations.

The findings on market development growth strategy ranked as follows; Torget a new Mobila banking customer segment, Open new geographical branches nationally Aided by mobile technology. Open new geographical branches regionally Aided by mobile technology. Seek additional information technology distribution channels and lastly Open new geographical branches Internationally aided by mobile technology. There were no significant variations on the responses as shown by the standard deviations. The results imply that as far market development growth strategy is concerned, commercial banks main focus is targeting a new mobile banking customer segment. On the other hand commercial banks have adopted the strategy of opening new branches new branches nationally aided by mobile technology to a moderate extent. It can also be deduced from the findings that opening new geographical branches

regionally aided by mobile technology, seeking additional information technology distribution channels and lastly opening new geographical branches internationally aided by mobile technology were the least adopted strategies by the commercial banks.

Results on product development strategy imply that in terms of product development strategy, commercial banks have emphasized on the following areas to a large extent: Targeting a new Mobile banking customer segment, opening new geographical branches branches nationally Aided by mobile technology, opening new geographical branches internationally aided by mobile technology and opening new geographical branches internationally aided by mobile technology.

From the findings it is evident that as far as diversification growth strategy is concerned, commercial banks indicated that commercial banks carry out other business related activities to the current banking business. It is also quite evident from the results that commercial banks have not ventured into businesses unrelated to the current banking business.

The findings on the extent to which the bank executives' management perceive the attributes of mobile banking in business expansion were as follows; Anywhore banking. Anytime banking, Beast to access, Secure means of service, Reduces costs, Direct customer control of account movements, Greater processing speed, Accuracy, Convenience, Real time service, User interface and Mass market delivery mechanism. The following implications can be drawn; commercial managers perceive the following attributes of mobile banking in business expansion as effective; anywhere banking, anytime banking, geographical boundaries, Easy to access, Convenience, Real time service, User interface and Mass market delivery mechanism. The factors that the mangers indicated that were only significantly important to a small extent for business expansion purposes were; anything banking, Secure means of service, and Direct customer control of account movements.

The implications of the findings on how the bank management considers the following attributes in banking business is that the commercial managers perceive communicating with the customers and leadership in customer service as very crucial aspects in successful banking business. Attributes that were considered important to a small extent were; Technology leadership and Market Shara loadership

Results on the whether the commercial banks have introduced an application for self-service technologies (SSTs) showed all commercial banks have adopted self-service technologies it can be deduced from the standard deviations that there were no significant variations in the responses. The findings imply that Automated Teller Machines has been adopted by all the commercial banks, followed by mobile banking then electronic banking and lastly internet banking. This can be said to be a step towards the right direction as far as self-service technologies is concerned.

It was also revealed that as for as the benefits of mobile banking to commercial banks are may be summarized as follows. Time saving, Profit Maximization Convenience, and Quick and continuous access to Information. On the other hand commercial banks were of the opinion that the following were not the key benefits of mobile banking: Cost reduction and better bank branding.

### 5.3 Conclusions

Based on the findings, it can be concluded that majority of the commercial banks do offer services through the customers' mobile phones. It can also be concluded that commercial banks use mobile services for purposes of accounts request. Maintaining high quality of Services is extremely important as far as commercial banks are concerned.

Based on the findings on the market development growth strategy it may be concluded that Target a new Mobile banking customer segment in terms of the market development growth strategy. It may also be concluded that geographical branches internationally aided by mobile technology is one of the least strategies used by the commercial banks.

Based on the findings on product development growth strategy, it can be concluded that targeting a new Mobile banking customer segment as one of the product development growth strategies adopted by most of the commercial banks. As far as diversification growth strategy is concerned, commercial banks indicated that they carry out other business related activities to the current banking business.

Based on the findings on the extent to which the bank executives' management perceive the attributes of mobile banking in business expansion it may be concluded that anywhere banking, anytime banking at Transcends geographical boundaries, Easy to access, reduced costs and Convenience are perceived as important attributes of mobile banking by the management executives.

Based on the Results on how the benefits of the mobile banking are regarded by the commercial banks it may be concluded that, Cost reduction, Profit Maximization. Better bank branding, Time saving, Convenience, Increased customer comfort and Quick and continuous access to Information are the major banefits of mobile banking as far as commercial banks are concerned.

### 5.4 Limitations Of The Study

The study was limited to the perspective of the commercial bank management point of view only. Most of the Asian owned commercial banks maintained that it is against the company policy to give any kind of information to outsiders including researchers.

### 5.5 Suggestions For Further Research

The study was conducted in all the commercial banks. The findings can be ventied by conducting the same study in other non-commercial banks as well. The study findings are according to the commercial banks management point of view. The study can be conducted to find out the customers' point of view.

### 5.6 Recommendations on Policy and Practice

Commercial banks management should change their perception on cost leadership, market share leadership and technology leadership in order to take advantage of the mobile banking technology in the growth of the banking industry

#### REFERENCES:

- Abhay, J and Hundal B S (2002). Factors influencing Mobile Phone Service Adoption in Flural India Asia Pacific Journal of Rural Development, Vol 8, pp 15-41
- Ali H and Hang M (2006) Technology Adaption: the Case of the Banking Firm, Journal of Internet Banking and Commerce, Vol.15 No. 3, pp328-335
- Anderson, J. (2006). A structured approach for bringing mobile telecommunications to the World's poor. The electronic journal of information systems in developing countries, 27, 2: 1-9.
- Anguelov, C. E., Hilgort, M. A., & Hogarth, J. M. (2004) U.S. consumers and electronic banking, 1995-2003. The Federal Reserve Board
- Ansoff, H (1987) Corporate strategy New York: McGraw Hill
- Ansoff, H. & McDonnell, E. [1990]. Implanting strategic Management (2" edition). United Kingdom Prentice hall Cambridge.
- Acchemub, A. Motingo, D. & Stork, C. (2002) Economic development potential through IP telephony for Namibia. Discussion paper No. 2002/84, United Nations University
- Aron, D. and Surnstein, D. (2003). Broadband Adoption in The United States: An Empirical Analysis.
- BankAway Not Banking Benefite! Sheer Acceleration. Electronic Banking: The Ultimate
  Guide to Business and Technology of Online Banking. (2001). SCN Education 8.V
- Bortol, A.P., & Sicherman, N. (1998). Technological change and the skill ocquisition of young workers. Journal of Labor Economics, 16(4), 718.755.
- Basel Committee on Banking Supervision. Risk management principles for electronic banking (2003). Bank for International Settlements, Switzerland.
- Busel Committee on Banking Supervision. Risk Management for Electronic Banking and Electronic Money Activities. [1998]. Bank for International Settlements, Switzerland
- Backer, G S [1971] Economic theory New York Alfred A. Knopf
- Benjamin, R. J., Rokart, M., Morton, S., and Wayman, J. (1984). Information Technology, A. Strategic Opportunity, Sloan Management Review, p27.34
- Berger, A.N. [1995] The profestructure relationship in banking, test of market power and efficient-structure hypotheses. Journal of Money, Credit and Banking, V27, n2, p.404-432.
- Berger, A. N. & DeYoung, R. (2001). The offects of geographic expension on bank efficiency. Journal of Financial Services Research, Vol. 18, pp. 183-184.

- Berger, A.N., DeYoung, R. & Udell, G.F. (2000). Globalization of financial institutions: Evidence from pross-border Banking performance. Unpublished manuscript
- Borgor, A. N. & Mester, L. J. (1997). "Inside the black box. What explains differences in efficiency of financial institutions?" Journal of Banking and Finance, Vol. 21, pp. 895-947.
- Bett, S.K. (1995). Strategic Marketing of Dairy products in Kenya, Unpublished MBA project, University of Nairobi
- Bradley, L. & Stewart, K (2002). A delphi study of the drivers and inhibitors of Internet.
- Banking, International Journal of Bank Marketing, 20(6), 250-260
- Erian A. W. [1996]. Increasing returns and the new world of Business. Hervard Business. Review, July/ August 1996. P.P.100-109.
- Bruce A . & Langdon K. (2000) Strategic theory. New York: Darling Kindersley Publishing, Inc.
- Burness 8 (2000) Managing change: a strategic approval to organizational Dynamics (3rd addition) Prentice hell
- Charen, T. [1998] Every Business is a Growth Susmoss. Times Books
- Chang, Y (2002) Dynamics of banking technology adoption: An application to Internst banking Working Paper. University of Warwick
- Chepkwony, J. [2001] Strategic response of petroleum firms in Kenya to challenges of increased competition in the industry. Unpublished MBA project, University of Noirobi.
- Communications Commission of Kenya (CCK) (2005) Annual Report 2004/ 05
- Clamons, S. [1986] Information Systems for Sustainable Competitive Advantage. Journal of Information & Management, Vol. 11, pp. 131-136.
- Clemons, E. and Row, M. [1993] Information Power and the Control of the Distribution.

  Channel, Chief Executive, p. 84-87.
- Cooper and Emory (1995) Business research methods (5" edition) Chicago Irwin
- Crockett, A (2001) Financial Stability in the Light of the Increasing Importance of Online-Banking and E-Commerce BIS Review 5/2001
- Curren, J. and Meuter, M. (2005) Self-Service Technology Adoption: Comparing Three Technologies, Journal of Services Management, 19 (2), March 2005, pp103-113
- Daniel, E. (1999). Provision of Electronic banking in the UK and the Republic of Ireland. International Journal of Bank Marketing, 17(2), 72-92.

- Daniel, E., & Storoy, C. (1997) Online banking: Strategic and management challenges. Long. Range Planning, 30(6), 890-898
- Dalrymple, D., & Parsons (1992). Marketing Management, John Wiley and Sons, Inc.
- Day, G.S. (2004) Which way should you grow? Harvard Business Review
- DeYoung, R. & Hunter W.C. (2002) Deregulation, the internet, and the Competitive viability of large banks and community banks: the future of banking. Greenwood press, Querum books.pp. 173-201
- DoYoung, R. (1994) Foo-Based Services and Cost Efficiency in Commercial Banks. OCC Working Paper no. 94-3. Washington, D.C. Office of the Comptroller of the Currency.
- DeYoung, R (2001) Learning-by-doing, scale efficiencies, and financial performance at internet-only banks. Federal Reserve Bank of Chicago, working paper, No. WP-2001-06
- DeWoot, P., Hayvaert, H., and Mortou, F. [1978] Strategic management: An empirical Study of 168 Belgian firms: International Studies of Management and Organizations, 7, 60-75
- Doyle, P. [1994] Marketing management and Strategy Prentice Hall international
- Eagle, N [2005] Pervasive computing in the midst of powerty powerty; Entrepreneurship and education through mobile phones in Kenya, MIT, Noke Proposel
- Egan, C and Thomas (1998) Strategic Marketing. Read educational and Professional Publishing Ltd.
- Fairlie, R. (2004). The Determinants of the Global Digital Divide. A Cross-Country Analysis of Computer and Internet Panetration." Santa Cruz Center for International Economics, Working Paper Series 1022, Center for International Economics, UC Santa Cruz
- Forman, I (2004) The Market Structure Of Broadband Telecommunications. Journal of Industrial Economics, v48 i3: 305,329
- Gernard, P. & Cunningham, J. B. (2003). The diffusion of Internet banking among Singapora consumers. International Journal of Bank Marketing, 21(1), 16.28.
- Glaussner, T. [2003] Electronic Safety and Soundness: Securing Finance in a New Aga. Public Policy Issues. The World Bank
- Gönroos, C. [1984] Strategic Management and Marketing in the Service Sector. London Chartwell-Bart.
- Gronroos, C. (1994). From marketing mix to relationship marketing. Management Decision, Vol. 32 No. 1, pp. 4-20.

- Gourlay, A. & Pentacost, E. (2002). The determinants of technology diffusion: Evidence from the UK financial sector, The Manchester School, 70(2), 185-203.
- Gray, R (1998) A place of their own Marketing, Sept 3, pp. 21-24
- Graumann, S. & Koshne, B. (2003) Monitoring Information Economy, 8. Fact Sheet 2003. NFO infratest on behalf of the German ministry of Economics. Munich
- Gultman, J. & Madden, T. (1997). Marketing Management, the McGraw-Hill Co. Inc.
- Goldfarb, A. H. and Prince, A. H. (2006). Knowledge management: an Organizational capabilities perspective Journal of Management Information Systems, 18(1), 185-214
- Goolsbee and Klenow (2005) The Consumer Gains From Direct Broadcast Satellites And The Competition With Cable TV. Econometrica v72 (2:351-381)
- Graham B. and William M. (2003). International Dictionary of Finance, March, 4th edition.
- Hannan, T. H. & McDowell, J. M. (1984). The determinants of technology adoption. The case of the banking firm. Rand Journal of Economics, 54(3), 328-335.
- Hansen, GS and Womerfelt, B (1989) Determinants of firm performance the relative importance of economic and organizational factors. Strategic Management Journal, Vol. 10 pp.399-411
- Hambrick, D., Geletkanycz, M. and Fredrickson, J. (1993) Top Executive Commitment To The Status Que, Some Tests Of its Determinants, Strategic Management Journal, vol 14, no 6, p.401-418
- Hausman, J. [2002]. Mobile telephone. The handbook of telecommunication economics.
- Haynes, M. & Thompson, S. (2000) The productivity impact of IT deployment. An empirical evaluation of ATM introduction. Oxford Bulletin of Economics and Statistics. 62 (5), 631-643.
- Hat, C. and Frei M. (2002). Competitive advantage of broadband internet: A comperative study between South Korea and the United States, Telecommunications Policy, 28 (9.10). 649.677
- Hofer, C. W. & Schendel D. [1978] Strategy formulation. Analysis Concepts. St. Paul West. Publishing.
- Hughes, J.P., (1996) Efficient Banking under Interstate Branching. Journal of Money, Credit, and Banking 28, 1043-71.
- Hughes, J.P. (2000) Are Scale Economies Elusive or Illusive?" Federal Reserve Bank of Philadelphia, manuscript

- Hunter, W. C. (2001). The Internot and the commercial banking industry: Strategic implications from a U.S. perspective,\* Financial Intermediation in the 21st Century, Zuhayr Mikdashi (ed.), Basingstoke, Hampshire, UK: Palgrave, pp. 17-28
- Hunton, W. C. & Stephen T. [1991] Technological change in large U.S. commercial banks. Journal of Business, Vol. 84, pp. 208–245
- Hunter, W. C. (1995) "Internal Organization and Economic Performance. The Case of Large U.S. Commercial Banks," Federal Reserve Bank of Chicago, Economic Perspectives, September/October 10-20.
- Hunter, W. C. [2001] 'The Internet and the Commercial Banking Industry: Strategic Implications from a U.S. Perspective' Financial Intermediation in the 21st Century, Zuhayr Mikdashi, ed., Palgrava
- Hunter, W. C., & Timme, S. (1986). 'Technical Change, Organizational Form and the Structure of Bank Production.' Journal of Money, Credit and Banking 18 (May): 152:166
- Hunter, W. C., & Timmo, S. (1991) Technological Change in Large U.S. Commercial Banks. Journal of Business 64, 206-245
- Hunter, W. C., et al., (1990) An Examination of Cost Sub additivity and Multi product.

  Production in Large U.S. Banks, Journal of Money, Credit, and Banking 22, 504-525.
- ITU (2002) World telecommunication report
- RU (2003) Mobile overtakes fixed: Implications for policy regulation
- ITU (2006) World Telecommunication ICT Development Report. Measuring ICT for social and economic development
- Jauch L.R. and Gueck, W.F. (1988), Business Policy and Strategic Management (5" edition), McGraw Hill, Inc.
- Jeyawardhena, C., & Foley, P. (2000). Changes in the banking sector, the case of internet banking in the UK, Internet Research: Electronic Networking Applications and Policy, 10(1), 1930.
- Johnson and Scholes (2002), Exploring Corporate Strategy, Texts and cases, Prontice Hall, 6" edition
- Jun. M. & Cal. S. [2001], the key determinants of internet banking service quality. A content analysis, international Journal of Bank Marketing, 19(7), 278-291.
- Kandie P (2001). A study of the strategic responses by Telkom Kenya Ltd in a competitive environment, Unpublished MBA project, University of Nairobi.
- Kanter R M (1984), Innovation The Only Hope for Times Ahead? Sloan Management Review, Special Issue, p 51-55

- Karjaluoto, H., Mattila, M., & Pento, T. (2002). Factors underlying attitude formation towards online banking in Finland. International Journal of Bank Marketing, 20(6), 261-272
- Keck A and Djiofack Zobazo, C. (2006) Talecommunications services in Africa The impact of Multilateral commitments and unilateral reform on sector performance and economic growth WTO staff working paper ERSD 2008-10
- Ketinger, W., Grover, V., Guha, S. and Sogars, A. (1994). Strategic Information System. Revieted: A Study In Sustainability And Performance. MIS Quarterly vol. 2 p. 31-58.
- Kreyer, N., Pousttchi, K.; and Turowski, K. (2002). Standardized Payment Procedures as Köy-Enabling Factor for Mobile Commerce. In Bauknecht, K.; Querchmayr, G.; Tjos, A.M. [Eds.]: E-Commerce and Web Technologies. Third International Conference, ECWeb 2002. Aix-an-Provence, pp. 400-409
- Kolod-miky, J. M. (2004). The adoption of electronic banking technologies by US consumers. The International Journal of Bank Marketing, 22(4), 238-259.
- Kountz H. & Gable R. [1956] Public control of economic enterprise. New York McGraw Hill Book Company Inc.
- Kotler P. (2001). Marketing Management. Prentice Hall India, the Millennium edition.
- Lancaster, G. [1988]. Essentials of Marketing, McGrew Hill Book Company (UK) Ltd.
- Love, D (2005) An averview of the South African telecommunications industry from pre 1994 policy making to gloomy 2005 resides. Research report. University of Witwatersrand, South Africa.
- Madden G., & Coble Neal G. (2004). Económic determinanta of global mobile telephony growth Information aconomics and Policy, 16, pp. 519 534
- Mahmood, M.A. and Soon, S.K. (1991). A Comprehensive Model for Modeluring The Potential Impact Of Information Technology On Organizational Stratogic Variables. Decision Sciences, 22(4), 869-897.
- Meso, P., Muso, P. & Mbarika, V. (2005). Towards a model of consumer use of mobile information and communication technology in LCOs. The case of Sub Saharan Africa. Information system Journal, 15, pp. 119 146.
- Morton P., Zettelmeyer J., and Siver R. (2001). Residential demand for Access to the Interne in Madden, G. (ed.), Emerging telecommunications networks. The international handbook of telecommunications economics, Volume II. (pp. 1-20). Chaltenham, Edward Elgar Publishers.
- Mueter, K. and Curren, S. (2005). The use of information Technology to Transform the Banking sector in Developing Nations, Information Technology for Development, Vol.11, No. 4, pp. 305-312.
- Minsky, H. (1986). Stabilizing an unatable sconomy. Now heaven. Yells University Press.

- Mintzberg, H. [1973]. Stretagy- making in three modes, California Management Review, Vol. 2 pp 44 53
- Molynoux, P (2000). Does size matter? Financial restructuring under EMU. Unpublished manuscript
- Naisbitt, J (1995) Inventing the Corporation: Transforming Your Job and Your Company for the New Information Society, 2nd ed Alvin Toffler The Third Wave 1980
- Nathan, L. (1999) Community banks are going online. Community and Banking, Federal Reserve Bank of Seston.
- Nea 9.5 [1988] Factors Facilitating the Use of Information Technology for Competitive Advantage. An Exploratory Study, Information 6 Management 15, pp. 191-201.
- Paula, L.F. [2002] Expansion strategies of European banks to Brazil and their impacts on the Brazilian banking sector, Latin American Business Review, v 3, n 4, p 59 91
- Pearce J.A. & Robinson, R. (2001). Strategic Management: Strategic formulation and Implementation (3" edition). U.S.A. Richard O Irwin Inc.
- Pamakrishnan G (2001) Risk Management for Internet Banking Information Systems
  Control Journal, Vol. 6
- Pousttchi, K. [2003] Conditions for Acceptance and Usage of Mobile Payment Procedures, in Giaglia, G. M., Warthoer, H., Tachammer, V.; Foeschi, K.; *Inbusiness* The Second International Conference on Mobile Business. Wien
- Pousttch, K., Turowski, K., & Weizmann, M. (2003). Added Value-based Approach to Analyza. Electronic Commerce and Mobile Commerce Business Models. In Andrade, P.A.E., Görnez.
- Rautenstrauch, C., and Ries, R.G. (2003) International Conference of Management and Technology in the New Enterprise pp. 414-423
- Porteuse C (2006) The evolution of e-banking: a study of Indian and Kenyan technology awareness. International Journal of Electronic Finance, Vol 3, pp 45-89.
- Pousttchi K. & Schung M. (2004). Assessment of today's Mobile banking applications from the view of customer requirements. Proceedings 37th Hawaii ICSS
- Powell, T. C. (1995) Information Technology As A Business Advantage, The Role Of Human, Business, And Technology Resources, Strategic Management Journal, Vol 18, p.375-405
- Pyun, Chang, S., Scruggs, L. and Nam, N. [2002] Internet Banking in the US, Japan and Europe, Multinational Business Review, pp. 73–81.

- Rackof, N., Wiseman, C. and Ullnch, W. [1985]. Is For Competitive Adventage implementation Of A Planning Process MIS Quarterly vol 9 p 285-295
- Rejagopal, (2007). Dynamics of Buyer-Supplier Co-dependency for Optimizing Functional Efficiency, Marketing Working Papers 2007-03-MKT
- Reed and DeFillippi [1990]. Organizational Culture: A ten Year, Two-phase Study of Change in the UK Food Retailing Sector Journal of Management Studies Volume 39 Issue 5
- Redrick D [2003] Growth Stretegies John F. Kennedy School of Government Hervard University
- Rokart, J. and Shot, J. (1989), IT in the 1990s, Managing Organizational Interdependence, Stoan Management Review, p. 7-17
- Santomero, A.M., & Eckles, D.L. (2000). The determinants of success in the new financial services environment. FRBNY Economic policy Review 11-23
- Sothyo M (1999) Adoption of Internet banking by Australian consumers: An empirical Investigation International Journal of Bank Marketing, 17 (7), 565-577
- Schaechter, A (2002) Issues in Electronic Banking: An Overview IMF Policy Discussion Paper PDP/02/6
- Schondel, D. & Hoter C.W. (1979) Strategic Management: A new view of business policy and planning. Boston Little Brown and Co.
- Schilder, A (2001) Banking in the New Economy: A Supervisory Perspective, BIS Review 16/2001
- Schulz, E. [1999]. The Marketing Game (12" edition). Tata McGraw Hill. Adams media. Corporation.
- Songoant, C. (2000) E-Banking: Risks and Responses. Financial Services Authority
- Stawart, J.B. (2000). "Changing Technology and the Payment System." Federal Reserve Bank of New York, Current Issues in Economics and Finance, 8, 11.
- Stoneman, P., & Kwon, M. J. (1993) The diffusion of multiple technologies, Warwick Business. School, University of Warwick
- Sullivan, R. J. (2000) How Has the Adoption of Internet Banking Affected Performance and Rick at Banks? A Look at Internet Banking of the Tenth Federal Reserve District. Federal Reserve Bank of Kansas City Financial Industry Perspectives, December 1-16
- Sullivan, R and Wang, Z (2005) Internet Banking, An exploration in Technology Diffusion and Impact, Working Paper, No. 05-05. Payments Systems Research Department\*, Federal Reserve Bank of Kanses City

- Thompson & Strickland (2001). Strategic Management Concepts and cases [7" edition). New York: Richard D. Irwin Inc.
- Thompson, H.G. & Garbacz, C. (2007). Mobile, fixed fine and internet service effects on global productive efficiency: Information sconomics and policy UNCYAD (2006). Information Economy report.
- VanHoose, H. (2003) Toward a Model for the Acceptance of Internet Banking in Developing Countries, Information Technology for Development, Vol. 11, No. 4, pp. 381-398
- Walter, I [1999] Financial services in the Euro zone European Management Journal, v.17, n.5, p. 447 465
- Waverman, L. Meschi, M. & Fuss, M. (2005). The impact of telecoms on economic growth in developing countries. In Vodatora Policy Paper Series, vol. 2, Africa. The impact of mobile phones.
- Wemerielt B. (1989) From entical resources to corporate strategy. Journal of General Management, Vol. 14 No 3, pp 4-12
- Whalen, G. (2001) The impact of the Growth of Large, Multi state Banking Organizations on Community Bank Profitability. Office of the Comptroller of the Currency, manuscript.
- Whiteley, R (1997) The Customer Driven Company The forum corporation
- World Bank (2006) Information and communications for development: Global trands and policies World Bank, Washington, DC
- Zehra and Covin [1993] Impact on the Organizational Performance of the Strategy-Technology Policy Interaction. Journal of Business Research Vol 23
- Zhu Y, Jiang, H, Wang J., and Xian F. (2008). HBA: Distributed Metadata Management System for Large Cluster based Storage. IEEE Transaction on Distributed and Parallel Systems, Vol. 19, No. 6, pp. 750-763, June 2008.

# **APPENDICES**

# APPENDIX I:

# QUESTIONNAIRE:

PART A.

Gq	nor	<u>ul Information</u>
Plo	1. 2. 3.	Name [Optional] Bank [Optional] Job Title Department
Ca	mm	orcial Bank Characteristics;
1. 2.	٠	How do you classify your bank? Government owned domestic bank [ ] Privately owned domestic bank [ ] Foreign Owned Private bank [ ] If privately owned as above, where is the origin of the bank?
	:	African Asian American European Other (Specify)
<b>3</b> . <b>4</b> .	•	For how long has your bank operated in Kenya?  Less than five years  5 - 15 years  18 - 30 years  19 31 -50 years  Over 50 years  How many branches does your bank have?  Less than 5 branches
	•	5 - 15 branches [ ] 16 - 30 branches 31 -50 branches Over 50 branches
5.	:	What is your branch network distribution? Wide geographic distribution Sparse geographic distribution Concentrated in the cities/ major urban centers [ ]
6.		How many branches has your bank opened in the last five years?  Less than 5 branches 5 - 15 branches (16 - 30 branches 31 - 50 branches (17)
7.		Over 50 branches [ ]  What was your ending year customer base?  Leas than 100,000 customers [ ]  100,001 - 500,000 customers [ ]  500,001 - 1,000,000 customers [ ]

Over '	1,000.000	customers

# PART B. Mobile banking and business strategies

Β.		Does your bank offer any services through Yes No	jh 1	he n	nob [	ile p	ho	nes (	of .	Cust	on	ners?
		b) If yes as above, for what purposes	. 2		ι.							
		Request of account balances	) :		1	1						
		Control of account movements			1.4							
		Instant payments			1							
		Administration of the account			Î							
9.		Please, indicate the extent to which each	of	the	foll	awin	ıg i	a im	po	rtan	t t	0
		your bank on a scale of 1 - 5 where:					_					
		■ Very large extent										
		- Large extent										
		= Moderate extent										
		Small extent										
	7 -	No extent			_		_		_		_	
		F	1		2		3	,	4		5	
	0	Encourage customers to transact	Ļ	1		l	[	J	(	,	ļ	J
	_	through mobile phones as convenient	7		1 1		,		ï			,
	0	Educata customers about benefits of using mobile banking more often	Ļ	1	1.	l	l	J.	Į.	,	1	J.
	٥	Give discounts for more usage	,	1		1	,	1	ï			
	0	Reward frequent users of mobile banking	ι	]	١.	l	ι	1	ı,	1	ļ	j.
		Services	1	}	10	1	r	1	í	1	1	1
	0	Give privileges to frequent users of		Į.	1 .	ı	L	J	į.	ı	1	J
	_	Mobile banking services	1	l .	6.3	)	1	1	r	ı	1	1
	0	Create membership for current users	'n	í			ì	ที่	ì	1	1	í
	0	Maintain high quality of			1	,			1			,
		Services	1	1	1.1	)	1	1	ſ	1	1	1
	0	Use of mobile devices as a customer feedt	ac	ķ	1	,		•		1	1	*
		System	[	]				]	[	]	1	)
	0	Educate customers about various uses of	mo	bile			•	-		•	1	,
		devices in banking	[	]			[	)	[	]	[	)
	0	Promote different uses of mobile										
		devices in banking	[	]				]		]		}
	0	Introduce differential tariffs based on level										
		of adoption of mobile banking		] .				]	[	ļ.		] _
10	-	In determining the extent to which you	ш <b>г</b>	Dank	L U	605	mi	arkel		10val	ap	mant
		growth stratogy, please indicate the extermportant to your bank on a scale of 1 to			ALLIT	:n 01	ВСГ	OFE	ם ת	TOU	OW	ing is
		5 - Very large extent	Э.									
		4 - Large extent										
		3 - Moderate extent										
		2 - Small extent										
		1 - No extent										
			5		4		3		2		1	
	0	Target a new Mobile banking customer										
		segment	[	]	[-1]				(	]		]
	0	Open new geographical branches nationals	V				- '		-	-	_	_

Open new geographical branches regionally Aided by mobile technology [ ] Open new geographical branches Internationally aided by mobile technology distribution channels [ ] In determining the extent to which your bank use growth strategy, please indicate the extent to whi important to your organization on a scale of 1 to 5 - Very large extent 3 - Moderate extent 2 - Small extent 1 - No extent  Oevelop bank products according to the needs of to Customers [ ] Oevelop different bank product features for different ou Preferences [ ] Oevelop different bank product quality levels to suit Your customer pocket [ ] In determining the extent to which your bank use atrategy, please indicate the extent to which eac important to your bank on a scale of 1 to 5 5 - Very large extent 4 - Large extent 3 - Moderate extent 2 - Small extent 1 - No extent 5 Carrying out another business related to the Current banking business [ ] Carrying out business unrelated to the Current banking business [ ]		[]	[]	[]
Open new geographical branches Internationally aided by mobile technology Seek additional information technology distribution channels In determining the extent to which your bank use growth strategy, please indicate the extent to whi important to your organization on a scale of 1 to 5 - Very large extent 4 - Large extent 3 - Moderate extent 2 - Small extent 1 - No extent 5 Oevelop bank products targeted to existing Customers () Oevelop bank products according to the needs of to Customers () Oilferentiate bank product features for different ou Preferences () Oevelop different bank product quality levels to suit Your customer pocket () In determining the extent to which your bank use strategy, please indicate the extent to which eac important to your bank on a scale of 1 to 5 5 - Very large extent 4 - Large extent 3 - Moderate extent 2 - Small extent 1 - No extent 5 Carrying out another business related to the Current banking business () Carrying out business () Carrying out business unrelated to the	( )	11	$\Box$	[]
o Seek additional information technology distribution channels  In determining the extent to which your bank use growth strategy, please indicate the extent to wi important to your organization on a scale of 1 to 5 - Very large extent 4 - Large extent 3 - Moderate extent 2 - Small extent 1 - No extent 5  o Develop now bank products targeted to existing Customers () Customers () Customers () Cifferentiate bank product features for different cu Preferences () Cevelop different bank product quality levels to suit Your customer pocket () In determining the extent to which your bank use atrategy, please indicate the extent to which sac important to your bank on a scale of 1 to 5 5 - Very large extent 4 - Large extent 3 - Moderate extent 2 - Small extent 1 - No extent 5 Carrying out another business related to the Current banking business () Carrying out business unrelated to the			4 .	
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growth strategy, please indicate the extent to which important to your organization on a scale of 1 to 5 - Very large extent 4 - Large extent 3 - Moderate extent 2 - Small extent 1 - No extent 5 o Develop now bank products targeted to existing Customers () o Develop bank products according to the needs of the Customers () o Differentiate bank product features for different culpreferences () o Develop different bank product quality levels to suit your customer pocket () In determining the extent to which your bank use atrategy, please indicate the extent to which sac important to your bank on a scale of 1 to 5 5 - Very large extent 4 - Large extent 3 - Moderate extent 2 - Small extent 1 - No extent 5 o Carrying out another business related to the Current banking business () o Carrying out business unrelated to the	( )	[]	[]	[]
1 - No extent  Develop now bank products targeted to existing Customers  Develop bank products according to the needs of the Customers  Differentiate bank product features for different out Preferences  Develop different bank product quality levels to suit Your customer pocket  In determining the extent to which your bank use atrategy, please indicate the extent to which sact important to your bank on a scale of 1 to 5  Source Very large extent  A - Large extent  A - Large extent  A - Large extent  Carrying out another business related to the Current banking business  Carrying out business  Carrying out business unrelated to the	nich ea	luct der ch of ti	velopm ha falla	ent wing is
Obvelop now bank products targeted to existing Customers Obvelop bank products according to the needs of the Customers Obvelop bank product features for different out Preferences Obvelop different bank product quality levels to suit Your customer pocket In determining the extent to which your bank use atrategy, please indicate the extent to which sact important to your bank on a scale of 1 to 5  - Very large extent - Large extent - Moderate extent - Moderate extent - No extent - No extent - Carrying out another business related to the Current banking business - Carrying out business unrelated to the				
Customers  Oevelop bank products according to the needs of to Customers  Olifferentiate bank product features for different out Preferences  Oevelop different bank product quality levels to suit Your customer pocket  In determining the extent to which your bank use strategy, please indicate the extent to which each important to your bank on a scale of 1 to 5  5 - Very large extent 4 - Large extent 3 - Moderate extent 2 - Small extent 1 - No extent 5  Carrying out another business related to the Current banking business  a Carrying out business unrelated to the	4	3	2	1
O Develop bank products according to the needs of to Customers O Differentiate bank product features for different out Preferences O Develop different bank product quality levels to suit Your customer pocket In determining the extent to which your bank use strategy, please indicate the extent to which each important to your bank on a scale of 1 to 5 S - Very large extent 4 - Large extent 3 - Moderate extent 2 - Small extent 1 - No extent 5 Carrying out another business related to the Current banking business Carrying out business ( ) Carrying out business unrelated to the				
Customers  Olifferentiate bank product features for different outer Preferences  Olifferent bank product quality levels to suite Your customer pocket  In determining the extent to which your bank use strategy, please indicate the extent to which sact important to your bank on a scale of 1 to 5.  Solveny large extent  4 - Large extent  3 - Moderate extent  2 - Small extent  1 - No extent  Carrying out another business related to the Current banking business  Carrying out business unrelated to the	l J	U	U	( ]
Preferences Oevelop different bank product quality levels to suit Your customer pocket  In determining the extent to which your bank use strategy, please indicate the extent to which sac important to your bank on a scale of 1 to 5  5 - Very large extent 4 - Large extent 3 - Moderate extent 2 - Small extent 1 - No extent 5  Carrying out another business related to the Current banking business a Carrying out business unrelated to the	( )	[]	[]	[]
Your customer pocket (1)  In determining the extent to which your bank use strategy, please indicate the extent to which sac important to your bank on a scale of 1 to 5  5 - Very large extent 4 - Large extent 3 - Moderate extent 2 - Small extent 1 - No extent 5  • Carrying out another business related to the Current banking business (1) • Carrying out business unrelated to the	acome:	[]	( )	
<ul> <li>12. In determining the extent to which your bank use strategy, please indicate the extent to which each important to your bank on a scale of 1 to 5.</li> <li>5 - Very large extent.</li> <li>4 - Large extent.</li> <li>3 - Moderate extent.</li> <li>2 - Small extent.</li> <li>1 - No extent.</li> <li>5</li> <li>o Carrying out another business related to the Current banking business.</li> <li>( )</li> <li>Carrying out business unrelated to the</li> </ul>			4.3	
o Carrying out another business related to the Current banking business ( ) a Carrying out business unrelated to the				wth
Current banking business ( ) Carryng out business unrelated to the	4	3	2	1
	[]	[]		[]
	[]	[]		[]
PART C. Bank Managament Perception  13 Please indicate the extent to which your bank ex-				

 Please indicate the extent to which your bank executive management perceives the following attributes of mobile banking in business expansion on a ecele of 1 to 5

### Where:

5; to a very large extent

4; to a large extent

3; to some extent

2; to a small extent

1; to no extent at all.

	Least extent				large e			
		1	2	3	4	5		
	<ul> <li>Anywhere banking</li> </ul>	( )		( )				
	<ul> <li>Anytime banking</li> </ul>	ii	ΪÍ	į į	<u>i i i </u>	ίi		
	<ul> <li>Anything banking</li> </ul>	ii	ii	i i	ii	ii		
	Transcends geographical bo	undanest	11	7.5	1.1	11		
		1 1	- 11	11	7.1			
	Lasy w access	11		1 1	1 1			
	<ul> <li>Secure means of service</li> </ul>	1 1	ĻĮ					
	Reduces costs	l I		l J	( )			
	<ul> <li>Direct customer control of a</li> </ul>	count			4.6			
	<ul> <li>movementa</li> </ul>	[ ]	[]					
	<ul> <li>Greater processing speed</li> </ul>	[ ]		[ ]	( )			
	<ul> <li>Accuracy</li> </ul>	[]			[]			
	<ul> <li>Convenience</li> </ul>	1.1			[]			
	<ul> <li>Real time service</li> </ul>	i i	i i	ίi		11		
	<ul> <li>User interface</li> </ul>	ii	ìί	ii	ii	ìί		
	<ul> <li>Mass market delivery mecha</li> </ul>	i i menne	ìi	ii	ii	7.1		
14	How does your bank management		followi	na attri	butes i	n`′		
	banking business?							
		Loast impor	tant	Most	mpor	tent		
		1	2	3	4	5		
	How to communicate with customs	ers []	(1)	[]	[ ]	[ ]		
	How customers Communicate with	you [	i i	ΙÍ	ίi	i i		
	Leadership in customer service			ÌΪ	i i	i i		
	Technology leadership		1)	( )	( )			
	Market Share leadership	( )	1 1	( )	( )	i i		
	Banking products leadership		1)	( )				
1.0	Cost effective service delivery	1.1	[ ]	i i	[ ]			
	Efficiency in service delivery	1	[ ]	( )		(1).		
	Innovation in service delivery	11	( j	[ ]				
15.	Has your bank introduced an appli	cation of self	-servici	o tachni	anigolo	(88Ta)?		
	Yes		[]					
	No							
b)	If yes as above, how are the follow				ink?			
		Least Used	Mos	t Used				
		1 2	3	4	5			
	Automated Teller Machine (ATM)		4.1		[ ]			
	Internet banking		1	[ ]				
	Electronic banking	11 11	1	( )				
	Mobile banking		(1)					
16.	How are the following benefits of t	the self service	e tach	nalogia	: (59Ts	1		
	regarded by your bank?							
		Least Impor	tant	Most	t Impar	tant		
	Free and other	7 2	3	4	5			
	Cost reduction	11 11	Ţ		Ļļ			
	Profit Maximization	11		Υį	Υį			
	Better bank branding	ii ii	[ ]	i i	ij			
	Time saving	Ti ii	1.1	i i	H			
	Convenience	11 11	1.1	11				
	Increased customer comfort		( )					
	LINES DEC CONTRICUE SASSAS TO							

	Information	[]	[]	[ ]	[]	{ ]	
17.	How are the following benefits of			ng rega rtant		your bank' t Importan	
	Cost reduction	1.1	ΠĪ	f 3	1.1		
	Profit Maximization	ii	ίí	ìí	ìί	ìí	
	Better bank branding	ii	ii	- 1 1	ìi	i i	
1.5	Time saving	ii	ii	11	11	11	
	Convenience	ìí	ìí	1.1	- 1 1	ìí	
1.5	Increased customer comfort	ìi	ìi	1.1	ìí	7.1	
	Quick and continuous access to				. ,	. ,	
	Information	[]	[]	{ }		[]	

\*\*THANK YOU \*\*

# APPENDIX II: COMPLEMENTARY LETTER TO THE RESPONDENTS:



UNIVERSITY OF NAIROBI School of Business, P. O. Box 30197, Nairobi - Kenya. Tel: +254 (020) 732160.

# To Whom It May Concorn:

Date:

The bearer of this letter
Registration number
Business administration (MBA) student at he University of Nairobi
The student is required to submit, as part of the coursework assessment, a research
project report on a given management problem. We would like the students to do their
projects on roal problems affecting firms in Kanya today.
We would therefore appreciate if you assist the student collect date in your
organization to this end. The results of the report will be used salely for purpose of
academic research and in no way will your organization be implicated in the research
hindings.
A copy of the report would be availed to the interviewed organization(s) on request

Thank you,

The coordinator, MBA program

### APPENDIX III:

# LIST OF COMMERCIAL BANKS

1	African Banking Corporation
2	Bank of Baroda Kenya Ltd.
3	Bank Of India (K) Ltd
4	Barclays Bank of Kenya Limited
5	Bank of Africa.
6	CFC Stanbic Bank Limited
7	Charterhouse bank Ltd
8	Chase Bank (K) Limited
9	City Finance Bank limited.
10	Commercial Bank of Africa Ltd
11	Consolidated bank of Kenye Ltd.
12	Co-operative Bank of Kanya Ltd
13	Credit Bank Ltd.
14	Development Bank of Kenya Ltd
15	Diamond Trust Bank of Kenya
16	Dubei Bank Ltd
17	Equatonal Commercial Bank Ltd
18	Equity Sank
19	Ecobank Ltd
20	Family Bank Ltd
21	Fidelity Commercial bank Ltd
22	Fina Benk Ltd.
23	First Community Bank Ltd
24	Giro Commercial Bank
25	Guardian Bank
28	Gulf African Bank Ltd
27	Housing Finance Ltd.
28	Habib Bank A.G. Zunch
29	Habib Bank Limited
30	Imperial Bank Limited.
31	Investments & Mortgages (I&M) Bank
32	Kenya Commercial bank Ltd

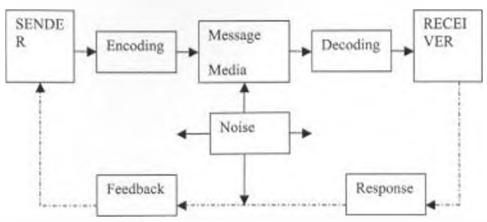
33	K- Rap Bank
34	Middle east Bank Kenya Ltd
35	National Bank of Kanya
36	National Industrial Cradit Bank
37	Onental Commercial Bank
38	Paramount - Universal Bank Ltd.
39	Prime Bank Limited.
40	Prime Cepital and Credit Finance Ltd
41	Savings and Loan (K) Ltd
42	Southern Credit Banking Corporation
43	Standard Chartered Bank (K) Ltd
44	Trans- National Bank Ltd
45	Victoria Commercial Sank Ltd

Source: Central Bank of Kenya (March, 2009)

### APPENDIX IV:

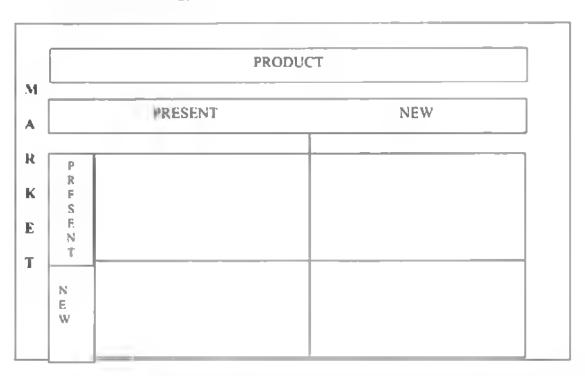
### TABLES, FIGURES AND DIAGRAMS

### Elements of communication



Source: Kotler (2001), Marketing Management, Millennium Edition, New Jersey Prentice Hall, pp551

### **Ansoff Growth Strategy Matrix**



Source Kotler (2000) Marketing Management, Millennium Edition, New Jersey Prentice Hall.