

Association for Information Systems AIS Electronic Library (AISeL)

AMCIS 2004 Proceedings

Americas Conference on Information Systems
(AMCIS)

December 2004

Globalization and the Nigerian banking industry: dynamics of context/process interaction

Abiodun Bada

The George Washington University

Fidelis Ikem

Virginia State University

Emmanuel Omojokun

Virginia State University

Ephraim Eyob

Virginia State University

Adeyemi Adekoya

Virginia State University

See next page for additional authors

Follow this and additional works at: <http://aisel.aisnet.org/amcis2004>

Recommended Citation

Bada, Abiodun; Ikem, Fidelis; Omojokun, Emmanuel; Eyob, Ephraim; Adekoya, Adeyemi; and Quaye, Ago, "Globalization and the Nigerian banking industry: dynamics of context/process interaction" (2004). *AMCIS 2004 Proceedings*. 73.
<http://aisel.aisnet.org/amcis2004/73>

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2004 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Authors

Abiodun Bada, Fidelis Ikem, Emmanuel Omojokun, Ephraim Eyob, Adeyemi Adekoya, and Ago Quaye

Globalization and the Nigerian banking industry: dynamics of context/process interaction

Abiodun O. Bada, PhD

The George Washington University
Dept. of Engineering Management &
Systems Engineering
Washington, DC
aobada@gwu.edu

Fidelis Ikem, PhD

Virginia State University
Department of Computer Information
Systems
Petersburg, VA
fikem@vsu.edu

Emmanuel Omojokun, PhD

Virginia State University
Department of Computer Information
Systems
Petersburg, VA
emmanuel@vsu.edu

Ephraim Eyob, PhD

Virginia State University
Department of Computer Information
Systems
Petersburg, VA
eeyob@vsu.edu

Adeyemi Adekoya, PhD

Virginia State University
Department of Computer Information
Systems
Petersburg, VA
aadekoya@vsu.edu

Ago Quaye, PhD

Virginia State University
Department of Computer Information
Systems
Petersburg, VA
aquaye@vsu.edu

ABSTRACT

This paper applies a context/process interaction approach to study information technology (IT) and organizational change within the Nigerian banking system. A contextualist approach is a research method that studies the interaction between a particular phenomenon and the context within which it is taking place. In this study we attempt to assess how the context of banking interacts with and influences the implementation of new technology-enabled banking products/services. In discussing this interplay, we suggest that the implementation of technology-enabled products/services within the Nigerian banking system is both adapting to and transforming existing structures within the industry. At the level of practice, this highlights the importance of contextualizing technology-enabled banking products/services and further supports the view that an effective globalization strategy should take the local context into consideration.

Keywords

Globalization, Information Technology, Organizational Change, Developing Countries, Nigeria, Banking

INTRODUCTION

In this paper, we re-examine the debate about how local events interact with global pressures in contemporary times. We adopt a contextualist approach to study how new technology-enabled banking products and services are being implemented within the Nigerian banking system. The background to the study rests squarely on the increasing interconnection within the emerging global economy, which Castells (1996) refers to as “a networked, deeply interdependent economy, and its implications for developing countries (DCs). An important part of a contextualist study is how the contexts influence, and are influenced by the process of change. Walsham (1993) regards this linkage as being of crucial importance in understanding how technology and organizational change are constrained by the context in which they are taking place and in turn how they maintain or alter the context. This linkage between the context and process of change has been a major concern of

organization and management researchers over the years. The important linkage between structure and action takes from the view that organizational actions are neither purely deterministic nor purely voluntaristic (Van de Ven and Poole, 1988).

In this paper, we present such an interactive view of the globalization process within the Nigerian banking system. For the purpose of this study, we have classified phases in the evolution of the banking industry in Nigeria into four stages namely: the era of free banking (Period up to 1959); the era of banking legislation (1959 - 1970); the era of indigenization (1972-1986) and the era of deregulation (1986 - Present). During the first era, banking activities in Nigeria were carried out predominantly by foreign banks. The second phase in the history of banking in Nigeria witnessed the beginning of banking regulation with the establishment of the Central Bank of Nigeria in 1959. The era of indigenization witnessed increased government intervention in the banking industry when government acquired 40% of equity participation (which was later increased to 60%) in foreign companies, including banks, with the sole aim of putting executive control in the hands of Nigerians.

The fourth period of deregulation started with the introduction of the Structural Adjustment Program (SAP) - towards the end of the 1980s and different sectors of the economy - including banking - were liberalized with a view to promoting competition and efficiency. In the face of wider regulatory, competitive and technological changes Nigerian banks have, over the past few years, been investing extensively in IT and adopting global IT-based practices (Woherem, 2000). The body of our review focuses mainly on some of these major trends that have been observed in the transformation of the commercial banking sector in Nigeria. In the next section we set out the theoretical framework for studying IT and organizational change within the Nigerian banking system. As the paper intends to explore how Nigerian banks are responding to global pressures of deregulation, liberalization and IT implementation, an organization-environment interaction perspective to the study of change was identified as appropriate (Goodman, 1982).

IT AND ORGANIZATIONAL CHANGE PROCESS MODELS

Within the IS literature, studies on the implementation of IT have generally been placed within models of process which differ in terms of the roles given to the environment and human action (Kraemer et al., 1989; Orlikowski, 1996). Five different models of: environmental determinism, managerial actionism, organizational evolutionism, institutionalism and systems interactionism were identified by Kraemer et al. (1989). Environmental determinism posits that external 'conditions and influences' shape all aspects of the internal context of the organization, including IT and organizational change (Glaser et al., 1983). This particular model is similar to what Orlikowski (1996) called the technological imperative model of technology-based organizational change, which considers technology as the main determinant of organizational change.

Managerial actionism on the other hand, ignores much of the external environment to focus on the actions of management in bringing about change. The type of technology and the way they are used depends, by and large, on the information needs of the organization and how decision-makers within the organization go about satisfying these needs. In the organizational evolutionism model, both organizational actions and environmental forces are seen as important in the process of change. However, the environment is seen as providing the impetus for a progressive and irreversible trend of change, and organizational actions are merely a reaction to environmental pressures.

In the institutionalism model, actions of decision-makers are recognized as important in deciding technology-based change. Although these actions can be idiosyncratic and at times can be seen to be 'rational', they are actually a part of a broader set of visions and actions, which makes them to be institutionally derived. Swanson and Ramillier (1997), influenced by this line of thinking, developed a model of the process of adopting an IS innovation which they termed an "organizing vision". This model implies that decisions for the implementation of new IT innovations in an organization are generally influenced by the (wider) general views about the importance of the new innovation created by a heterogeneous network (community) of actors in the inter-organizational field where the organization is situated and participates.

The fifth and final model examined is the systems interactionism model, in which both environmental forces and organizational actions interact recursively in the change process. The environment influences what actions are taken within the organization and these actions (or the outcome) in turn influence (and sometimes alter) the environment by providing the contexts for further actions. Organizational actions are seen as reactive in response to environmental demands or deliberative, taken in anticipation of future environmental changes or other reasons which seem relevant to the actor.

This particular model is increasingly being adopted in IS research. Markus and Robey (1988) argued for an emergent perspective of IT and organizational change, which posits that the way we use IT and with what outcome, is a function of both human choice and environmental characteristics. Similarly, the structurational model put forward by Orlikowski (1991)

also argued for an interactional approach to the study of technology use within organizations. Technology-based change, she argued, should be viewed as a non-deterministic process which takes into account the role of technology, human choice and actions involved, as well as the socio-historical context of the organization.

Our choice of a contextualist perspective in this paper leads us to adopt a process theory based on a general assumption that organizations operate in an environment of multiple demands that interacts recursively with one another in influencing the change process (Van de Ven, 1992). With regards to choosing between the IT implementation process models reviewed above, we would adopt the systems interactionism model which gives due cognizance to the interaction of both environmental influences and organizational actions in the change process.

NEW DIRECTIONS: IT AND ORGANIZATIONAL CHANGE IN NIGERIAN BANKS

The Nigerian Financial system is made up of the capital market, the money market and specialized institutions. The capital markets consist of the Nigerian Stock Exchange (NSE), the Securities and Exchange Commission (SEC) which is the regulatory authority for the capital market, issuing houses and stock broking firms. Within the money market, the Central Bank of Nigeria (CBN) and the Nigerian Deposit Insurance Corporation (NDIC) are the two regulatory/supervisory authorities. Merchant banks, commercial banks, discount houses and community banks are the other institutions within the money market. The focus of study here is the money market and within that we have chosen commercial banks. The reasons for our choice relate to the fact that commercial banks are arguably the major players and users of IT within the industry. Commercial banks in Nigeria have variously been referred to as 'first' or 'old' generation banks for those banks that have been in operation before liberalization and 'second' or 'new' generation banks for those that are the direct product of the liberalization process.

An increasing number of technology-based banking products such as smart cards, home and Internet banking have been introduced into the sector (Idowu, Alu and Adagunodo, 2002). New generation banks such as All States Trust Bank and Diamond bank have pioneered the introduction of card-based payment systems with cards such as the 'ESCA' and the 'Diamond' cards for All States Trust Bank and Diamond bank respectively. The ESCA card was the first to be launched in the country in December 1995 with the aim of reducing dependence on cash and its attendant problems. Some of the problems relate to the depreciation of the local currency (Naira) and the huge amounts carried around, even for the most basic transactions. Carrying this huge amount of money around is a major security risk for both customers and banks and specifically for banks it represents a huge cost in terms of handling cash. On a normal day, it is not uncommon for bank branches to handle and process cash up to 40 million Naira.

ESCA and other Smartcard products allow customers to charge their cards up to the amount of money available in their accounts, which can then be used to pay for goods in participating retail outlets and petrol stations. In addition, customers who travel around the country to transact business need only to carry the charged card with them as they can withdraw money from the card at any of All States branch. These products have received wide acceptance due to some of the problems related to handling cash and especially those related to security and risks of carrying large sums of money around. Old generation banks like the United Bank for Africa (UBA) have also followed suit with UBA's Easy Card and First bank with its First Bank Value card. In addition to card-based products, other financial products that have been brought in to the market in Nigeria are deposit-based products such as UBA's school savers or Union Bank's UNISAVE - aimed at encouraging savings culture in Nigeria and at the same time providing savers with the opportunity to obtain financial help from the bank¹.

Another major development within the industry is the consortium of banks that are being established to operate various card-based payment schemes with a view to further reducing the dependence on cash. These joint efforts run in parallel with individual schemes already underway in some banks and they are intended to help banks achieve the critical mass that is needed in order to change people's orientation from cash transactions. In addition to providing a cashless wallet within the banking system, the scheme is also expected to facilitate and improve inter and intra-bank communication as well as developing an all-industry standard in smart card implementation².

The presence of the new generation banks, including affiliates of foreign banks that started operation after liberalization, has brought about a new approach to serving customers - completely different from what existed before. Prior to liberalization and to the coming of these new banks, the culture of banking within the industry was described as "armchair banking" where

¹ See, "UBA to introduce new product" (The Guardian, April 2, 1999)

² See, "VALUECARD: How 26 banks changed the face of money mart" (Vanguard, June 21, 1999)

customers were at the mercy of banks and were forced to accept whatever level of service banks offered. However, the new banks brought a completely different approach to serving customers and a more advanced level of computerization - some of which later became the 'standard' within the industry. Old generation banks' customers, seeing what obtains in some of the new banks, started asking their banks for the same level and quality of service, which therefore meant that banks had to change. In addition, the growing population of Nigerians in Diaspora and the need to send money to relatives back in Nigeria has meant that banks find new ways to attract these set of customers and meet their needs.

Quite a large number of banks are taking part in the money transfer business³ with numerous schemes and agreements signed with both local and foreign partners. UBA in 1999 introduced the UBAQuicash local money transfer alongside the Moneygram scheme, which is the international version⁴. Other such arrangements are First Bank's joint venture with Western Union Financial Services International to transfer funds locally with the Domestic Western Union Money Transfer (DWUMT) and its international version of Western Union Money Transfer (WUMT)⁵. All States Bank has also recently launched its own version of money transfer with Vigo Remittance Service and Union Bank recently launched its local money transfer scheme called Stallion Express to operate alongside the international version with Vigo International money transfer⁶.

Consequently increased expectations from local and foreign customers have led to banks rethinking their strategies for survival. This "fight for customers" has intensified and a major priority for banks now is retaining their most profitable customers and winning new ones (Yusuf, 2001). Some of the strategies banks have developed include FirstAtlantic Bank's "one-stop financial supermarket" and First City Monument Bank's "Universal Banking" where the aim is to provide a whole set of complementary services to customers thereby preventing them from having to do business with competitors. A by-product of this is the realization that in order to effectively serve customers, banks must possess a more robust method for collecting, integrating, and storing customer information. This has brought about a realization that the practice of maintaining fragmented information and systems is no longer acceptable and banks have started to link up their disparate systems and are constantly shopping for new banking software that will permit better integration

The rural banking scheme (RBS) is another major factor that influenced banks choice of IT-based products and services. The Nigerian government introduced the Rural Banking Scheme in 1977. Through the scheme, government compelled all banks to increase their presence in rural areas by allocating to each bank a minimum number of branches they had to establish within a specified length of time. The aim was to encourage rural banking habits, and also to mop up excess liquidity. However, the scheme was abandoned after the industry was liberalized in 1989, as it was argued that such a policy of establishing branches in 'unprofitable' areas conflicts with the tenets of profitability and efficiency which the government was trying to encourage with the introduction of the Structural Adjustment Program. Although the scheme itself was abolished, government would not permit banks to close down some of the branches already established in rural areas. As a result banks' computerization strategies have been heavily influenced by the RBS as branches established in rural areas during the RBS have mostly been left out of the computerization and reengineering efforts (Bada, 2002).

Due to successive government's poor fiscal control policies and the neglect of the local manufacturing base, Nigeria has over the years been plagued with a high rate of inflation, which has consequently led to a decline in the value of the local currency. This has therefore made it imperative for people to carry huge sums of money around in order to carry out even the most basic of transactions. Therefore, the high rate of inflation and the small currency denominations have made ATMs a less attractive option for banks. In the words of an IT Director in a new generation bank:

"Giving the importance and popularity of ATMs in the banking world, we discussed the idea of installing ATMs in all our branches nationwide but we had to shelve the original plan of installing outside ATMs given the security fears in the country and the problem of vandalism. So we decided that instead of having outside ATMs perhaps we should install them inside the banking halls for quick service to customers who do not really need to see a teller. But even this plan had to be reconsidered given the state of our economy and the inflationary pressures on our economy. In addition to this, the highest currency denomination in Nigeria is 50 Naira which, coupled with the inflation, makes it unworthy to install ATMs."

ANALYSIS: CONTEXT/PROCESS INTERACTION

How has the context in Nigeria influenced the implementation of IT-enabled products/services within the banking system and how have these in turn influenced the context? In discussing the interplay of IT-based organizational change process and the

³ See, "Domestic money transfer: CBN approval stirs up stiff competition" (Vanguard, February 22, 1999)

⁴ See "UBA to introduce new product" (The Guardian, April 2, 1999)

⁵ See, "First bank's domestic western union takes off" (Vanguard 21 June, 1999)

⁶ See, "Union bank introduces local money transfer" (The Guardian, March 30, 1999)

context within which it is taking place, we suggest that the implementation of IT and organizational change practices within the Nigerian banking system is both adapting to and transforming existing structures within the industry (see Table 1).

Customer expectations and influence of Nigerians living abroad have forced most banks to implement some form of local and international money transfer schemes to meet this new demand. Banks are also implementing integrated banking application packages that will fully support electronic and online banking. Consequently, the increased expectations from local and foreign customers have therefore led banks to focus more on customer relationship management (CRM) and not just 'better' customer service in order to keep their most profitable customers. It has also led banks to focus more on providing additional services/products such as the "one-stop financial supermarket, universal banking and online banking in the race to win new customers and keep existing ones. Finally, banks are beginning to have a better appreciation and use of information to win more customers. Banks are no longer just contended with computerizing manual processes but are also giving serious thought to how these disparate systems would work together.

The Rural Banking Scheme (RBS), the issue of non-profitable branches and the issue of poor national telecommunication infrastructure have led most banks to develop private arrangements to connecting their systems and branches including a mixture of VSAT, leased lines and microwave technologies (Ehikhamenor, 2003). However, due to the huge cost of computerization and networking branches, banks have adopted a multi-platform structure where branches are computerized and networked based on their perceived profitability. Rural branches that are considered non-profitable are either not computerized or have very basic systems installed in them. This, in turn, has led to on-going discussions with the government through the Central Bank of Nigeria (CBN) to completely abandon the RBS and allow banks to sell off these "non-profitable" branches.

The Nigerian economy has traditionally been heavily dependent on cash. The heavy dependence on cash and the associated security concerns have in turn influenced some of the technology-related products and services that banks currently offer. In an effort to reduce dependence on cash, banks have introduced electronic card-based payment methods and recorded considerable success due to the inconvenience and security risks involved in carrying huge sums of money around. However, because of the poor telecommunications infrastructure in the country coupled with the relatively low technology adoption rate within the wider society, most of the card-based payment systems have been limited to offline schemes such as pre-paid cards and offline electronic purse. To further reduce the dependence on cash, banks are encouraging the use of cheques and using MICR technology to facilitate the processing of cheques. These various efforts have further deemphasized the reliance on cash as an increasing number of organizations, including foreign embassies, cellular operators; federal agencies are accepting card-based payment methods.

Another profound effect is that banks are entering into alliances and forming consortia to share the cost of developing the required infrastructure. Prior to this, there was very little instance of collaboration and joint ventures amongst Nigerian banks. In addition, more card-based payment schemes are being taken into the rural areas since they are offline schemes and the establishment of the Nigerian Automated Clearing System (NACS) has further improved the process of clearing cheques.

CONCLUSION

In conclusion, this study has highlighted why it may not be possible for DCs organizations wishing to be active players in the global arena to just conform to taken-for-granted assumptions within the wider global context. Such an approach to technology implementation could mean a focus only on technology as the appropriate strategy on which to compete. It could lead to banking services becoming detached from the needs of bank customers and the wider context in which banks operate. A taken-for-granted view of IT implementation may sometimes lead to a mechanistic transfer of technology and technology-based products and services from developed to developing countries - which may not be ideal for the local context. Such products and services may make a bank or industry look global and modern but may not meet the needs of the local consumer and local strategic needs. Therefore, local response to globalization imperatives needs to be sensitive to local economic realities in order to make any meaningful impact.

At the level of practice, this study further highlights the importance of contextualizing technology-related banking products and services. Although this is not an exclusive problem of DCs, as studies such as Bebbington, Cronin & Davenport (1991) and Gosling (1996) have discussed similar problems in developed countries. However, the context of IT implementation in DCs is much different than in developed countries given the lack of resources and infrastructural and technological capabilities, which these countries have to contend with. It follows therefore, that the use of IT needs to be adapted to the priorities and contextual characteristics of the local context (Madon, 1992).

Although there seem to be a lot of activity within the Nigerian banking sector, much of this activity is concentrated within the formal sector and urban centers. Banks need to recognize the importance of focusing and developing the local base, especially the rural and informal sectors, as an effective strategy to participating within the global arena. For instance, more efforts can be given to developing rural finance and encouraging rural banking habits though such efforts may not appear glamorous or profitable initially. Government can further encourage banks to invest more in the development of rural finance by establishing standards and providing incentives to encourage innovative application of technology within the rural and informal sectors of the economy.

REFERENCES

1. Aldrich, H. (1979). *Organizations and Environments*. New Jersey, Prentice-Hall, Inc.,.
2. Bada, A. (2002) "Local adaptations to global trends: A study of an IT-based organizational change program". *The Information Society Journal, Special issue on IT and developing countries, (18) 2, 77-86 March-April*.
3. Bebbington, L., Cronin, B., and Davenport, E (1991). "Consumer Attitudes to Information Technology in Banking." *International Journal of Information Management 11*: 220-237.
4. Castells, M. (1996). *The Rise of the Networked Society*. Cambridge, MA, Blackwell Publishers.
5. Ekhimenor, F.A. (2003). "Information technology in Nigerian banks: the limits of expectations" *Information Technology for Development, Vol. 10*, pp 13-24.
6. Glaser, G., Torrance, A.L., and Schwartz, M.H. (1983). *Administrative applications*. Encyclopedia of Computer Science and Engineering. A. Ralston, and Reilly, E.D. New York, Van Nostrand Reinhold.
7. Goodman, P. (1982). *Change in Organizations: New perspectives on theory, research, and practice*. San Francisco, Jossey - Bass Publishers.
8. Gosling, P., [Ed.] (1996). *Financial Services in the Digital Age: The Future of Banking, Finance and Insurance*. Work in the Digital Age. London, Bowerdean Publishing.
9. Idowu, P.A., Alu, A.O., & Adagunodo, E.R. (2002) "The effect of information technology on the growth of the banking industry in Nigeria" *The Electronic Journal of Information Systems in Developing Countries, Vol. 10 (2)*, pp 1-8.
10. Kraemer, K. L., King, J.L., Dunkle, D.E., and Lane, J.P. (1989). *Managing information systems: change and control in organizational computing*. San Fransisco, Jossey-Bass.
11. Madon, S. (1992). *The impact of computer-based information systems on rural development: A case study in India*, PhD Thesis. Imperial College, University of London.
12. Markus, L., and Robey, D (1988). "Information Technology and Organizational Change: Causal Structure in Theory and Research." *Management Sciences 34*: 583-598.
13. Orlikowski, W. (1991). "The duality of technology: Rethinking the concept of technology in organizations." *Organization Science 3*(3, August): 398-427.
14. Orlikowski, W. (1996). "Improvising Organizational Transformation Over Time: A Situated Change Perspective." *Informations Systems Research 7*(1, March): 63-92.
15. Swanson, E. B., and Ramilier, N.C. (1997). "The organising vision in information systems innovation." *Organizational Science* September/October.
16. Van de Ven, A. H. (1992). "Suggestions for studying strategy process: A research note." *Strategic Management Journal 13*: 169-188.
17. Van de Ven, A., and Poole, M.S. (1988). *Paradoxical requirements for a theory of organisational change. Paradox and Transformation: Toward a theory of change in organisation and management*. R. Quinn, and Cameron, K. (Eds) Cambridge, Ballinger.
18. Walsham, G. (1993). *Interpreting Information Systems in Organisations*, John Wiley.
19. Woherem, E. E. (2000). *Information Technology in the Nigerian Banking Industry*. Ibadan, Spectrum Books Limited.
20. Yusuf, K (2001). "Customer Relationship Management in the Nigerian Financial Services Industry" Phillips Consulting Report, Phillips Consulting Ltd. Lagos, Nigeria. April.

Table 1: Globalization and the Nigerian banking sector: dynamics of context/process interaction.

CONTEXTUAL FACTORS	INFLUENCE OF CONTEXT ON TECHNOLOGY-BASED PRODUCTS/SERVICES	INFLUENCE OF TECHNOLOGY-BASED PRODUCTS/SERVICES ON CONTEXT
<p>Customer expectations and influence of Nigerians living abroad</p>	<ul style="list-style-type: none"> Forced most banks to implement some form of local and international money transfer schemes. Banks are implementing integrated banking application packages that will fully support electronic and online banking. 	<p>Increased expectations from local and foreign customers have led to:</p> <ul style="list-style-type: none"> the need for banks to focus on customer relationship management (CRM) and not just quality customer service. a focus on providing additional services/products such as "one-stop financial supermarket, universal banking and online banking in the race to keep profitable customers and win new ones a better appreciation and use of information to win more customers.
<p>The Rural Banking Scheme (RBS) and the issue of non-profitable branches Poor national telecommunication infrastructure</p>	<ul style="list-style-type: none"> Most banks have private arrangements including a mixture of VSAT, leased lines and microwave technologies Due to huge cost of computerization and networking all branches, banks have adopted a multi-platform structure where branches are computerized and networked based on their perceived profitability 	<ul style="list-style-type: none"> On-going discussions with the government through the Central Bank of Nigeria (CBN) to abandon the RBS and allow banks to sell off these non-profitable branches.
<p>Heavy dependence on cash and associated security concerns</p>	<ul style="list-style-type: none"> Introduction of electronic card-based payment methods as a way to reduce the reliance on cash Most card-based payment schemes are off-line due to the poor state of national telecommunications infrastructure and because the majority of people do not have online access Increasing use of MICR and cheques as a medium of payment 	<p>Reduced emphasis on cash where:</p> <ul style="list-style-type: none"> an increasing number of organizations, including foreign embassies, cellular operators, federal agencies like JAMB are accepting card-based payment methods banks are forming consortia to achieve a critical mass and share the cost of developing the infrastructure amongst hitherto competitors who, until recently, have very little interest in collaborative ventures. more card-based payment schemes are increasingly being taken into the rural areas as they are offline establishment of NACS has further improved the process of clearing cheques
<p>Inflationary pressures and local currency</p>	<ul style="list-style-type: none"> High rate of inflation coupled with small denomination of the Naira has restricted the acceptance and subsequent adoption of ATMs Security concerns have confined the use of ATMs to within bank branches 	<ul style="list-style-type: none"> Higher denominations of 100, 200 & 500 naira have brought ATMs back into focus Formation of consortia and the improved level of trust extended to include ATM transactions