

Consumption and Communication Perspectives of IT in a Developing Economy

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Abstract

Technological innovations are important sources of competitive advantage when there is a balanced rate of adoption that helps organisations maintain or improve performance levels. This paper synthesises and builds on efforts to conceptualise adoption and implementation of technologically-induced customer services in developing countries. Its point of departure is recent advances in computer-mediated marketing environments (CMMEs). It assesses relationships between customer services and evolving technologies in the provision of services in the banking sector. Using phenomenological hermeneutics and a case study approach, we iteratively engaged with data that emerged to identify core values and community-based values. These facets were further developed into seven main issues (core values: quality, education and reach, and community-based values: efficiency, usability, control and security). The paper offers practical steps by which companies and institutions may counter these issues and the theoretical implications for wider considerations are discussed.

Key words: new product development; marketing technology; marketing communications;

Nigeria; online banking; information technology

Introduction

Much theoretical and empirical evidence focuses on business models of innovation diffusion from developed countries, where pre-existing product technologies are modified and disseminated into developing countries' mass markets. (Hertwig, 2012; Ray and Ray, 2011; Egbetokun, 2015). **The most important route for companies and institutions in developing countries to acquire new technologies is to import them from developed countries. Timely technological adoption may solely depend on rational choices of the developed countries (i.e. the exporting countries) and technological content (Madanmohan, 2000). Ganesh and Kumar (1996) noted that when technological innovation occurs in one country, with a time lag in subsequent countries, consumers in lag countries have opportunities to learn from the experience of the lead country, referred to as a 'learning effect'.** Definitions of developing countries vary, but there is consensus on their characteristics. Ratanasithi, Sutummakid and Hemphill (2013) contend that developing countries:

1. Actively pursue of export-led growth and development;
2. Their export success is attributable to individual exporting firms;
3. Structural factors at national level occurring domestically are major export barriers.

Nuances exist among these characterisations. A study conducted by Ray and Ray (2011) examined how innovations meet the unique affordability and acceptability criteria of masses at the base of the pyramid (BOP). Their qualitative study elicited factors that impose challenges to MNEs as they break away from traditional business practices towards satisfying mass markets at the BOP. They pinpoint that poor infrastructure, institutional weaknesses, lack of support services and skills in developing countries may bring unforeseen challenges

and costs. 'With the intensity of environmental turbulence and near-absence of institutional support and policy incentives, many African firms struggle to survive, and surviving firms often struggle to grow.' (Kolade et al., 2018). Despite these challenges, potential exists in mass markets and financial services in developing countries, and for MNEs to tap into these potentials it is important to invest in product innovation that addresses affordability rather than importing business innovation strategies from developed countries.

A report in the McKinsey Quarterly (2014) states that Nigeria is well positioned to benefit from macro trends in the global economy, such as the shift of demand to developing economies, the explosion of digital technologies and a growing customer base in the banking sector. Nigeria is a key regional player in West Africa. With approximately 184 million inhabitants, it accounts for 47 percent of West Africa's population, and has one of the largest populations of young people in the world (The World Bank, 2018). Given the potential significance of Nigeria, this study sheds light on the wide range of issues that determine technological adoption and individual perceptions of new products in the banking sector.

Purpose

This paper extends conceptual theories on technological adoption and perceptions of advances in 'computer-mediated marketing environments' as distinct from 'technologically-induced customer services'. It is used to designate a state where marketing activities are undertaken in embryonic internet platforms, whereas 'technologically-induced customer services' refers to a state in which the process of marketing activities in market-based organisations moves from mass marketing towards a situation where enterprises target customers not as market segments, but as dynamic groups of individuals. Organisations are encouraged to capture, store, analyse and leverage customer information to enhance loyalty.

In this study we seek to expand understanding of the contextual path of technological adoption and innovations in developing countries. The paper builds upon earlier research that has explored technological diffusions from developed countries (Centindamar *et al.* (2009). These studies are perceptive, but they assume that technological adoption and innovations are unidirectional in developing countries. They do not explain the underlying contextual issues pertaining to such countries in sub-Saharan Africa, particularly Nigeria. Our discussion is framed in terms of theoretical fundamentals regarding democratic rationalisation, technological diffusion and capability-based theory. Extant conceptual literature on customer services is revisited and related to the exploration of technologically-induced customer services. Phenomenological hermeneutics are identified as the methodological approach. After explaining technological infrastructure issues, we continue with the methodological supposition of the study and the choice for phenomenological hermeneutics, using case study approach. Findings then report how our analysis and interpretation reveal the nature of context-driven challenges and the experimental problem-solving of technological adoption and innovations and conclude by discussing implications of the study and opportunities for further research.

Technological Infrastructure and Knowledge

Technology can be analysed from perspectives of original function and design and implementation. In contrast with media like newspapers, radio and television, the internet is not another voice or interpretation of daily life, but the construction of another life or virtual world which parallels that of daily life and face to face interaction. Computer networks construct a world and do not simply facilitate reflections; they develop social relations. Different perspectives of internet usage emerged during the 1980s.

The consumption model was recognition that the internet could go beyond information retrieval. Management of information could be developed for the market. Despite the shift toward the consumption model, there remained ‘the older practice of human communication on computer networks’ that remains the main emphasis for users for when they are online (Bakardjieva and Feenberg, 2002, 181). This space was not a ready-made environment. Through communication, users had to define and create the online space they would inhabit, thus manipulating designers’ rationale for technology which incorporates new types of social acts involving new normative implications that transcend the norms and functions of face-to-face interaction.

Communities are fundamental for human development and involve value creation, shared beliefs, commonality and participation, and are closely related to notions involved with democracy. The internet has radically changed delivery channels used by the financial services industry. Banks have established an internet presence using web technologies providing customers with opportunities for performing interactive retail banking transactions. Virtual customer environments are an integral element of overall customer relationship management. This allows firms to capture potential synergies between online and offline interactions in ways that benefits customers and companies (Ozuem, *et al*, 2008). The inherent benefits of online banking provide people with new ways of interaction. Much attention has been accorded to technology adoption and uses in financial institutions, particularly regarding provision of technologically-induced customer services and customer retention strategies in developed countries (Mols, 2001; Nielsen, *et al*, 2003; Venkatesh, *et al*, 2012; Baird, *et al*, 2012). Theory suggests that technological adoption and use-adoption are ideal types of computer-mediated marketing environments (Antioco and Kleijnen, 2010) capable of promoting effective marketing activities. Most knowledge is based on mechanisms and assumptions concerned with abundance and efficiency of technological infrastructures in

developed countries (Prince, *et al*, 2014). Whilst different theoretical perspectives offer insights on technological developments, these offer little on perceptions and utilisation of evolving technological environments in developing countries. Claims made for the existence of a digital knowledge divide are based on these binary perspectives:

- Digital technology is no longer a dichotomous categorisation between the ‘haves’ and ‘have-nots’;
- The digital divide is a continuum of access and use where interrelated reasons like attitudes, skills, quality of access and social support illustrate how people use new technologies.

The implementation of effective customer service in technologically induced environments entails understanding technological competences in context. Centindamar *et al.* (2009), provide an overview of which core activities form the body of technology management. They suggest that technological management can be categorised into six dimensions, providing a modernist underpinning:

- 1) ‘Acquisition’ is how a company obtains technologies valuable for its business, based on buy-collaborate-make decisions, i.e. technologies might be developed internally by collaboration, or acquired from external developers.
- 2) ‘Exploitation’ entails commercialisation, but expected benefits need to be realised through implementation, absorption and operation of the technology within the firm through incremental developments and process improvements.
- 3) ‘Identification’ is necessary for technologies at all stages of development, including marketing changes and technological developments.

- 4) 'Learning' involves reflections on technology projects and processes carried out within or outside the firm.
- 5) 'Protection' is a formal process such as patenting and staff retention which is in place to protect intellectual property within the organisation, including knowledge and expertise embedded in products and manufacturing systems.
- 6) 'Selection' requires a grasp of strategic objectives and priorities to enable an alignment between technology-related decisions and business strategy. Technological adoption is a continuous process that scans the environment and aligns technological capabilities and competences and ensures these are managed effectively.

With respect to these categorisations, there is a concern that market-driven technological innovations may lead to outcomes that are contrary to sustainable development in developing countries. Egbetokun (2015) noted that development and strengthening of technological innovations occurs via the process of technological learning which is a costly process requiring complex interactions among companies and other agents within specific institutional frameworks and geographical boundaries. The process and adoption of technological innovation is highly context-driven and path-dependent. He further argued that developed countries are exposed to higher order in-house capabilities and companies can thrive on the production and use of codified scientific and technical knowledge (p.223). Unlike developing countries, technological innovations are developed and adopted through practical problem-solving and experimentation on the shop-floor. Such innovations are an important source of competitive advantage when there is a balanced rate of adoption that helps organisations maintain or improve performance levels. Internet banking is part of a general trend where customer relationships and new web technologies are important.

Felix *et al.* (2017), suggest that acquiring and using feedback provided through social media platforms from disparate stakeholders is central to defining how different stakeholders can contribute to a firm's value creation. Differences in banks' organisational resources and capabilities have become tools for competitive advantage in developing and developed nations. Investment in sophisticated IT allows businesses to achieve differential advantage by securing relationships through improved service quality and market responsiveness. Roberts (2000) suggests that effective electronic communication requires a certain level of confidence and trust between parties involved, including a willingness to share information. Human nature is grounded in social constructs and is part of cognitive being, involving ideas pre-determined by society or endemic to being human. Janda, *et al.* (2002), examined consumer perception of internet retail service quality and found five key dimensions relevant to consumer participation within online environments:

1. Performance: how well an online retailer performs in meeting expectations regarding order fulfilment (efficiency);
2. Access: an internet retailer's ability to provide a variety of products from anywhere in the world (liberty);
3. Security: related to perceptions of trust in the online retailer's integrity regarding financial and privacy issues (legal structure and social contract);
4. Sensation: interactive features of the e-retailer's website (aesthetic experience);
5. Information: quantity and credulity of information provided by the online retailer (informed consumer).

Reflecting on Janda *et al.* (2002), Baron and Harris (2008) observe that the dimensions have some similarities with the constituents of SERVQUAL (a means of measuring the scale of quality in the service sector) dimensions; for example, trust, security and credibility, but

SERVQUAL was derived in the context of interpersonal service encounters, so an understanding of internet retail service quality is more complex than simply treating it as another SERVQUAL application. Customers' service expectations are characterised by a range of levels, bounded by desired and adequate service, rather than a single level. What is considered quality service that satisfies customers in developing countries may be different in developed economies. Customers are satisfied when purchase results exceed expectations; each experience leads to evaluation and an accompanying emotional reaction by the customer. That said, the basis of expectation has certain ideals at its core; it is difficult to discard predominant ideas and ideals even if the tools are novel by nature. A pre-understanding of requirements is apparent because society constructs notions, and to move beyond these (no matter the novelty) is difficult.

Methodology

Phenomenology hermeneutics uncovers life-world by identifying the importance of understanding/comprehending what may be considered everyday aspects of human existence. Consciousness and external structure are not separate but incorporate a holistic construction of lived experience. Through our personal histories, culture, language and environment, individuals are provided with understanding of the world through which reality is identified (Howell, 2013). Heidegger (1962/2004, p.24/25) argued:

'Every inquiry is a search [suchen]. Every search is guided beforehand by what is sought. Inquiry is a cognizant for an entity, both regarding the fact that it is and with regard to its being as it is ... inquiry itself is the behaviour of a questioner, and therefore of an entity, and as such has its own character of being'. 'Meaning resides within individuals because 'search must be guided beforehand by what is sought'.

Merleau-Ponty (1999) considered that being is directly present before any research, understanding or reflection begins. *“The world has an ‘inalienable presence’ which provides ‘a direct and primitive contact with the world’ which is endowed with ‘philosophical status’”*. Phenomenological hermeneutics is not about abstract supra-individuals or transcendental egos, but involves understanding people in actual situations (Howell, 2013).

Investigation, understanding and interpretation involve a hermeneutical circle because any attempt to question something involves notions regarding the nature of the matter or situation investigated; that is, some notion of the question in relation to the subject matter to be understood. Questions do not emerge from the ether, but already exist within us and form what is to be studied **in a subjective and objective context**. Fundamentally, the answers to questions cause us to re-assess perspectives originally held, thus involving further questions.

Given the concepts and issues raised through the methodology, this study attempts to illuminate and investigate human activity regarding the commercialisation of computer-mediated marketing in the Nigerian banking sector. Pre-understanding guided the research process and enabled respondents to recognise concepts and provide responses to questions posed. **This perspective underpinned the rationale for using purposive sampling which indicated a pre-supposition regarding what is sought in a phenomenological hermeneutics context. We deliberately selected individuals or contexts because they seemed likely to produce valuable data. Chosen participants incorporated unique subjects from which to explore lived experiences, regarding how these persons access and utilise internet platforms for banking transactions.**

Samples were drawn from individuals comprising semi-skilled and skilled workers. Eight participants were interviewed from four different top banks in Nigeria. In the next period participants were drawn from diverse backgrounds in four different locations across

Nigeria. Personal interviews were conducted in their respective environments or premises.

One-to-one semi-structured **interviews averaging approximately 40 minutes** were conducted with informants to explore their perspectives regarding a range of issues on technologically induced customer services (see Appendix 1). A total of 22 interviews were conducted in the second stage and their occupations, age and gender are summarised in Table 1.

OCCUPATION	AGE	GENDER
Interior decorator	25-35	M
Housewife	25-35	F
Student	18-24	M
Taxi driver	25-35	F
Member of the clergy	36-50	M
Housewife	25-35	F
Civil servant	25-35	M
Teacher	36-50	F
IT consultant	36-50	M
University lecturer	25-35	F
Business executive	36-50	M
Healthcare assistant	25-35	F
Civil servant	25-35	M
Bank manager	36-50	M
Engineer	25-35	M
Student	18-24	F
Plumber	25-35	M
Banker	25-35	F
Banker	36-50	M
Student	18-24	F
Sales person	25 35	M
Accountant	25-35	F

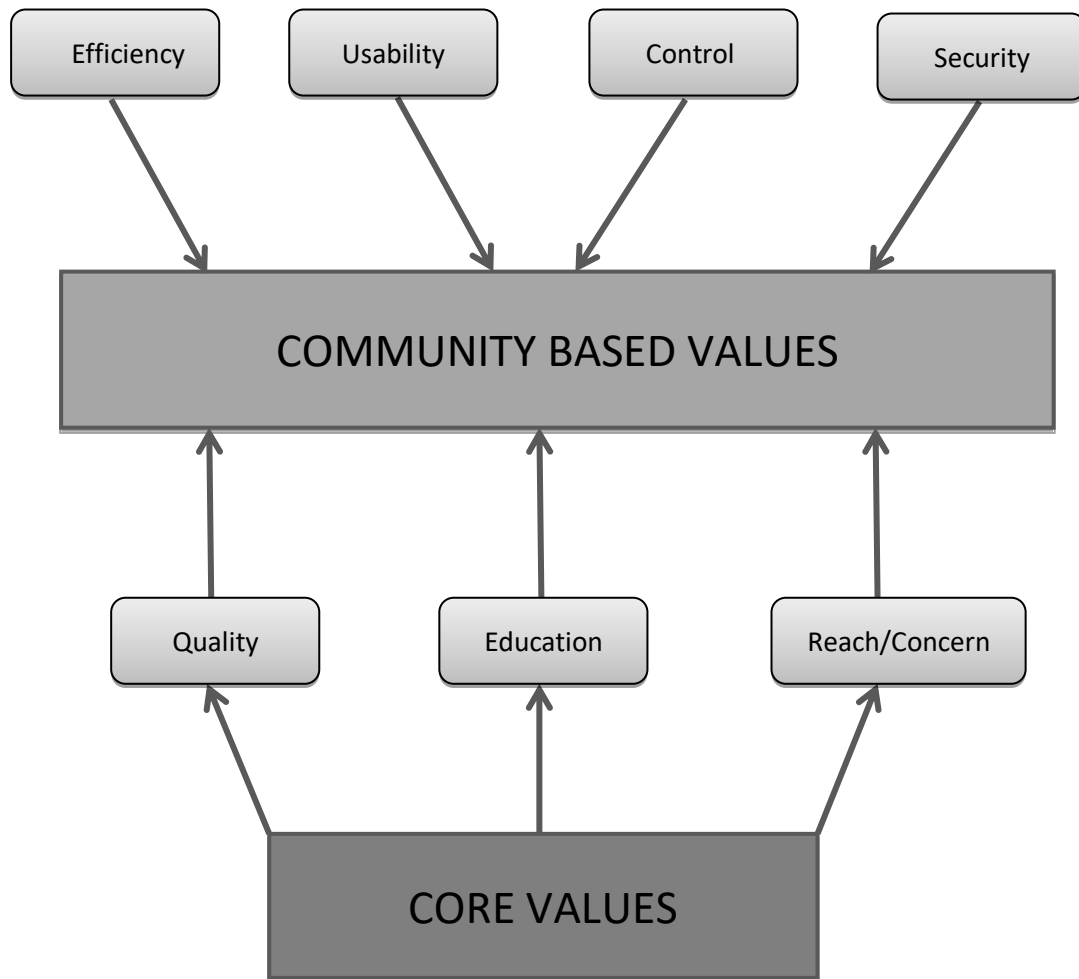
Table 1 (Demographic Information)

According to Fisher *et al.* (2016), '*semi-structured interviews allow for a degree of uniformity in the collection of data whilst careful probes of subjects' answers preserve flexibility and opportunity for the emergence of novel contributions and reflection on their use behaviours*' (p.134). Shortly after the interviews, we listened to the recorded transcripts several times and identified key themes that explicitly and plausibly summarised participants' inner experience and how meanings were formulated.

During the interview sessions, notes were taken of responses; material was reviewed to ensure salient points and recurring themes were articulated and patterned alongside responses as they emerged; questions were adapted, and further issues explored as interpretation and responses guided the research process. Gadamer (1970, 2008) explains that understanding is not an isolated activity but the basic structure of our lived experience. Historical understanding and cultural being should not be isolated from the research but incorporated within it so it enters interpretation and understanding. Attempting to remove tradition, culture and history is like removing the self from the research process. Consequently, understanding requires engagement with the self which involves biases and subjectivity. Preconceptions allow understanding everyday thought and discourse.

In a phenomenological hermeneutical context, a technologically induced marketing environment was not novel for interviewees as most had used the internet; each had pre-understanding of the technology. However, many had not used the internet for financial transactions. Customer pre-conceptions pertained to a wide range of issues regarding satisfaction in a service-oriented sector. Figure 1 illustrates attributes related to individual pre-conceptions and perceptions of technologically induced marketing environments.

Figure 1: Themes in technologically-induced environments: issues and challenges



Initial Emergent Themes

Four initial themes emerging from respondents' perspectives were derived from three core themes. As the analysis developed, some interlocking categories were triggered, which replicated and compounded some key issues in core values (quality, education, reach/concern) but were too complicated to be categorised using initial emergent themes. The principal emphasis on community-based values (efficiency, usability, control and security elucidate barriers and dimensions of the adoption of technology in the Nigerian banking sector. Investment in sophisticated IT may allow a business to achieve a differentiation strategy, provided effective customer service is backed up by human/managerial skills, without which organisations may not fully utilise the benefits of computer-mediated marketing environments (Baron and Harris, 2008).

1. Education

The internet has become a fully integrated marketplace where people can interact and search for information that can be derived from the online market place. Users can adopt different *personae* and become part of different communities where they can freely express themselves, interact and exchange ideas. Education involves elements of enlightened thinking and development of knowledge as intrinsic to the creation of a better society and a healthy democracy. As a 33-year-old self-employed interior decorator indicated:

'The internet is a great avenue for education. I have learnt things by searching online. Most of my designs come from pictures of well-decorated homes I saw online. There are e-books, reviews, essays and discussion forums for all kinds of subjects. My current catalogue of most beautifully decorated homes was compiled from the internet and that is what I use for my clients. I guess the same applies to online banking; the more I use it, the better I get.'

Being part of an online community fosters intellectual growth and is rewarding to those who take advantage of what the internet offers. Through the consumption model, the respondent further develops networks.

Points made by respondents in terms of education involved functional processes and means of facilitating learning. A **28-year-old** housewife stated:

'Being mostly at home has its downsides, but I rarely get bored. I'm responsible for managing household money, shopping, paying bills and housekeeping generally. I regularly pay our bills online using bank cards and manage accounts. I do not have to go to my children's school to pay fees; I simply transfer money into the school account. In terms of education, we all have looked up something we did not understand from an online source at one time or another.'

Efficiency is the underlying rationale for internet usage for this respondent, but further interaction with technology renders educative outcomes.

2. Reach/Concern

Reach defines wider coverage of the internet as a medium that goes beyond users' spatial definitions of time and place and fosters coverage beyond the physical environment. Individuals exist in separate situations at different times. Enlightenment notions such as boundaries, the nation-state and customary ideas regarding time and space are overtaken by internet usage; *'the internet ... exploded with imagined communities that are based on the swift interactive exchange of electronic text'* (Feenberg and Bakardjieva, 2004; p.38). Not everyone has access to the internet but being involved in time and space is increasingly becoming an aspiration. Simply having a computer is insufficient. As noted **by a 23-year-old** psychology student:

'The challenge is not having access to a computer. What discourages me is having no access to the internet. I have a computer at home but no internet. I tried subscribing to the mobile internet, but the connection was epileptic and there was no power supply.'

Whilst computer manufacturers offer low cost computer equipment, connecting these to the internet content poses difficulties. Social expectations are raised, and notions of improvement and economic advancement are required for involvement. A 55-year-old taxi driver commented:

'One of my younger brothers bought a computer 8 months ago. This is wasteful, since this money could have been used for something better. I waited for months to get connected to internet technology, but the (defective) electricity supply is not helping. We have an endemic problem with electricity supply. I am amazed to hear these banks promoting all sorts of programs related to digital environments. One crucial question which these companies have not yet got a grip of is the infrastructure that these online programs rest upon.'

Whereas the psychology student concentrates on optimistic aspects of developments, the mature taxi driver is concerned with internet operating requirements like sustainable electricity supplies. As respondents noted, low cost computers are readily available within Nigeria, but access to internet technologies cannot be achieved if technological infrastructures are poor. A 41-year-old IT consultant said:

'Issues regarding digital services are not our priority until the following are in place: electricity and security. Customers would rather continue with traditional banking than subscribe to online banking that is not sustainable.'

3. Quality

The concept of a service quality model has useful features for measuring quality in service-oriented enterprises. It is necessary for utilities such as electricity to be in place if service quality is to have technological capability and accessibility. The idea of service quality can be subjective or relative and relate to individual expectations. This **35-year-old university lecturer** respondent underlined:

'Service quality in terms of online banking is relative in the sense that what we expect from banks is different, and quality of service is defined by how well service matches customer expectations. I think quality depends on feedback and timely information.'

A 32-year-old healthcare assistant respondent indicated:

'I visited my bank a few months ago but was advised to check online for further information. I'm disappointed that this organisation assumes everybody has access to a computer. I would like more information available in banks rather than referring us to online banking information.'

Proactive feedback is dependent on technological capabilities both in companies' readiness to embrace technologies and users' accessibility to existing evolving technologies. As these respondents indicated, several infrastructural issues have affected the way financial services organisations provide timely information.

4. Community Based Values

Through customer services issues relating to online banking, four values emerged: convenience (efficiency), control (self-determination and empowerment), usability (inclusivity) and security (social protection). The consumption model is premised upon the

communication model, with humans developing technology and new space for social interaction.

5. Efficiency

Respondents identified strengths of the consumer model and considered convenience as a main reason for the adoption of internet banking. A 44-year-old project manager stated:

'When online banking started, I was a student. I was introduced to the internet early and quickly began applying it to my study. When my bank introduced internet banking, I was eager to try it and realised it was convenient for me. I can transfer funds between different accounts and monitor money as I spend it and do not have to ask for cheque books; I simply order them.'

Convenience meant less interaction with his bank manager and more time to attend to his banking needs. His perception involves efficient use of time and being empowered to take charge of transactions and maximise the full benefit of internet technology. A 38-year-old employee in a financial institution commented:

'Since my bank started online banking programs, I can say our customer base has grown. Despite this increase, employees have more time to attend to customers' needs as they are mostly channelled through our online feedback resource. It has helped in cutting costs in processing paper application forms. With internet banking, we take applications over the phone and enter data directly into the system. Other applications are mostly online, indicating efficiency on our part.'

This respondent sees banks and customers as co-creators of online banking in Nigeria as while banks are experiencing growth in their customer base, consumers are acquiring new

skills and affirming control over their banking needs. Two important issues emerged from this theme: flexibility and leaning. A 43-year-old IT consultant averred:

'I chose my bank for reasons of proximity to my house and place of work. I was satisfied with their quality of service. However, due to infrastructural glitches, I have done much online.'

An issue that emerged is that the choice of a financial services provider was dependent on proximity to his place of work and home. In the same manner, another 24-year-old respondent, a student at a Nigerian university, commented:

'To me, the fact that I do not have to carry money around is hugely convenient and safe. I am happy with my bank's cards and I keep my pins safe. I do not have to spend cash all the time. I make sure I monitor my account online, so I do not over-spend, but access can be frustrating, most times due to electricity problems.'

There is a recognition of benefits of online banking. A major problem is access to technology due to inconsistent electricity supply. Customers found they could easily adapt new banking systems enabled by the internet to their daily lives. This can be done conveniently so the process becomes seamless. For bankers, online banking is deemed cost effective and creates more time for research and development.

6. Control

Control is the ability of online banking customers to access content at will and generate information without restriction to access, download, modify and change content to suit their needs. It empowers consumers to interact with others in communities where values are shared. With online banking, consumers have access to real-time information and have

choices ranging from which bank to choose to what kind of service is most appropriate. A 36-year-old business executive stated:

'I have complete control over what I do on the internet, especially where banking needs are concerned. I can access my bank details anywhere and anytime. I rarely call my bank for anything unless it is security related. I can transfer funds when I want to and can even stop a transfer mid-way if I am unsure. What I'm saying is that with online banking, power has been given to us to take care of money how it suits us.'

Control involves being empowered to make decisions without having to wait in the bank. Having unrestricted access to accounts and being able to exercise free-will is beneficial. The internet has opened a new window to innovative ways of doing things and the power to effect change is exercised. Online banking offered her greater control than traditional methods where banks are overloaded with paperwork that slows down processes. An emerging key issue from control was trust. According to a 42-year-old member of the clergy, having control sometimes leads to misuse of power and abuse of trust:

'Much as I love the internet because it breaks the shackles of ignorance, it can be abused, especially where money is concerned. I have had complaints from friends who sometimes were charged for transferring money online by their banks; something they were not aware of before subscribing to the service. Some have complained that they have been charged for using their debit cards at certain shops and ATMs.'

Respondents perceived control as beneficial. They use the internet to carry out transactions, increase their learning and interact with others within a global community. However, it is evident there are misgivings concerning usage and patronage.

7. Usability

This describes the user-friendly attributes of the internet and online banking. Usability is important and is closely linked to the adoption of online banking. **This 28-year-old** respondent noted:

'There is publicity material in banks advising customers to use online facilities: I am sick of seeing these leaflets. I can hardly read ... never mind use the internet. I think they need to focus on personal areas.'

One important issue emerging from this respondent is inability to read and make use of internet technologies. Similarly, this respondent complained about lack of response from banks in online environments.

'I recently opened an online account with a bank, and I have been using it for almost a month. The problem is that the password and username the bank gave me never worked and each time I complained through e-mail, they did not respond in time and when they reset the password, I found that I could not log on. After several trials, I decided to go back to conventional banking transactions.'

An interesting issue here is response time. He had contacted his bank on several occasions regarding access problems yet seemed not to have achieved success.

One bank manager said:

'Much as we want more people such as students and business people to buy into internet banking, we are aware of their inadequacies, so we ensure our websites are simple, easy to navigate and informative. We constantly upgrade our internet banking technology to improve our capacity and accommodate our expanding customer base.'

8. Security

Participants were asked what they thought about the safety of their personal data on the web. One respondent, a 39-year-old college teacher, stated:

'Security has always been an issue. My wife and I operate a joint account online and I remember we gave the bank all our details such as home and workplace addresses, phone numbers, and our bank card and international passport details. Sometimes I panic just thinking what will happen if such information falls into the hands of an internet fraudster.'

Another 36-year-old respondent echoed these thoughts:

'I am a bit sceptical where internet banking is concerned. I have been waiting until I feel confident that my information or details will be safe and secure online. Otherwise, I might just stick with normal banking.'

Security is a major challenge and users live with the fear of card details being hacked, identity theft and funds being illegally transferred. This was more apparent with users who did not have a sound knowledge of the internet. Some participants who had a technical background and understood security technology had more confidence in internet security. In the light of this, another 38-year-old legal practitioner respondent stated:

'I have taken measures to ensure my data is safe by regularly checking my account balances, monitoring my transactions and printing receipts should I need to show evidence.'

Consumers tend to have more faith in banks that have strong security measures in place and can quickly respond to customers who have issues with data privacy, an emerging issue in security. A 23-year-old student respondent said:

'People who readily adopt internet technology are those who are willing to take risks and face new challenges. I advise people to believe in technology that brings new ways of doing things and be ready to accept risks and be innovative. Online banking is convenient. Customers should overlook the risks in favour of convenience and other positive factors that online banking brings.'

The virtual world of internet technology transcends time and space in a modernist context and online banking customers utilise the medium to learn about, refine and broaden their activities. As customers come together within the online interactive market space, they exchange information and constantly use the medium to enhance interaction and learning. There is experiential evidence from respondents that online banking is changing traditional banking and most banks' customers are positively disposed towards this medium.

To understand the impact of computer-mediated marketing environments on modern culture, one needs to identify sources of constraints and opportunities which follow from the 'situatedness' of its use in time-space (Ozuem *et al.*, 2011). Pressures and opportunities for mobilising time-space during the exchange of information constitute the grounding upon which effective computer-mediated marketing strategies could be developed and sustained. In its physical manifestations, such environments share characteristics across geographical boundaries due to interconnectivity and interoperability. In seeking to identify technological frames of meaning shared by respondents, it is argued that understanding technologically-induced customer services may occasion different problems and solutions, because social problems are dependent on community-based values. This interpretation of the adoption of technology utilises the concept of relevant social groups; those who influence the creation, demand, production, diffusion, acceptance, or opposition to the technology (Mingers and Willcocks, 2014). In this way, computer networks construct a world and develop social relations. Both the consumption and communication model explain the development of online

interaction. However, the latter remains the main emphasis for users most of the time they are online. The communication model furnishes computer networks' environments 'within which communities form and ways of life are elaborated' (Bakardjieva and Feenberg, 2002 p.182). Communities provide the basis for human development through value creation, shared beliefs, commonality and participation. Overall, interviewee perspectives reflected relationships between consumption and community models. Technology can be used for business purposes that are not autonomous of human existence and social development: as certain interviewees identified, it is socially constructed.

Conclusion and the direction of future research

Governments and institutions involved in management, design, provision and monitoring of internet banking should ensure customers and users are not subjected to fraud and identity theft as these negatively influence customer adoption. Monitoring the internet provides customers with information on security breaches and implications this might have. In such a way, negative pre-conceptions can be challenged, and positive attitudes facilitated.

When determining the direction online activity may take, there is need to examine relationships between the consumption model and the community model; the former 'is a plausible vision of the future, given the structural realities of the world in which we live' whereas the latter 'would take much more conceptual work, design efforts and political mobilisation' (Bakardjieva and Feenberg, 2002; p.190). Human activity is an important variable for the communication model; the extent to which people put their competencies and resources to work determine which emergent format and structure will prevail.

Providing faster, easier and more reliable services to customers were amongst the top drivers for online banking. Governments play a pivotal role in facilitating instrumental values through ensuring adequate provision of necessary requirements and should should reduce

costs of telecommunications' interconnectivity to encourage private investors who are willing to provide fast, affordable and innovative internet connectivity. Banks should invest in purposeful and integrated marketing communications to create awareness and educate the public on the concept of internet technology. **The outcome of our research may be relevant to development and adoption of technological innovation in a social context and be relevant to different industries in developing countries. Governments have major roles to play in changing negative societal perceptions in the development and adoption of technologically-induced customer services.**

Understanding information system acceptance-related influence process is important and such understanding shapes potential user perceptions and emotions related to information system implementation (Li, 2013). Educating customers and the public should involve free demonstrations of basic usability skills needed to derive satisfaction from the internet. The campaign could help produce more confidence in customers and improve their patronage. Banks and financial services providers should regularly update their websites with current information to help online banking users. They need to establish security features to discourage fraud and phishing. Banks should continue to measure levels of service quality by using SERVQUAL and other models to determine how much their services have improved over time.

The level of technologically induced marketing environments in Nigeria is distinctly different from that of developed countries. Studies should be undertaken to examine levels of technological diffusion in rural areas rather than from 'urbanised' perspectives and build on ethnographic accounts of online activity, interactions and cultures.

REFERENCES

- Antioco, M. and Kleijnen, M. (2010) Consumer adoption of technological innovations: effects of psychological and functional barriers in a lack of content versus a presence of content situation, *European Journal of Marketing*, 44(11/12), 1700-1724
- Baird, A, Furukawa, M.F. and Raghu, T.S (2012) Understanding contingencies associated with the early adoption of customer-facing web portals, *Journal of Management Information Systems*, 29(2), 293 -324
- Bakardjieva, M. and Feenberg, A. (2002) Community technology and democratic rationalization, *The Information Society*, 18(3), 181-192
- Baron, S. and Harris, K. (2008) Consumers as resource integrators, *Journal of Marketing Management*, 24(1/2), 113-130
- Centindamar, D., Wasti, S.N., Ansal, H. and Beyan, B. (2009) Does technology management research diverge or converge in developing and developed countries, *Technovation*, 29, 45-58
- Egbetokun, A. (2015) Interactive learning and firm-level capabilities in latecomer settings: the Nigerian manufacturing industry, *Technological Forecasting and Social Change*, 99, 231-241
- Feenberg, A. and Bakardjieva, M. (2004) Virtual community: no killer implication, *Media and Society*, 6(1), 37-43
- Fisher, M, Bland, R. and Lyytinen, K (2016) Social networking as the production and consumption of a self, *Information and Organisation*, 26, 131-145
- Felix, R, Rauschnabel, P. and Hinsch, C. (2017) Elements of strategic social media marketing: A holistic framework, *Journal of Business Research*, 70, 118-126

Gadamer, H-G, (2008) *Philosophical Hermeneutics*. Trans, D.E. Ling, University of California Press.

Gadamer, H-G, (1970) *On the Scope and Function of Hermeneutical Reflection*. Trans G.B. Hess and R.E. Palmer. London and New York: Continuum.

Ganesh, J, and Kumar, V. (1996) Capturing the cross-national learning effect: an analysis of an industrial technology diffusion, *Journal of the Academy of Marketing Science*, 24(4), 328–337

Heidegger, M. (1962/2004) *Being and Time*. Oxford: Blackwell.

Hertwig, M. (2012) Institutional effects in the adoption of e-business-technology. Evidence from the German automotive supplier industry, *Information and Organization*, 22,4, 252 -272

Howell, K.E. (2013) *An introduction to the philosophy of methodology*. London: Sage Publications

Janda, S., Trocchia, P.J. and Gwinner, K.P. (2002) Consumer perceptions of internet retail service quality, *International Journal of Service Industry Management*, 13(5), 412-443

Kolade, O., Obembe, D. and Salia, S. (2018) Technological constraints to firm performance: The moderating effects of firm linkages and cooperation, *Journal of Small Business and Enterprise Development*, <https://doi-org.ezproxy.herts.ac.uk/10.1108/JSBED>

Li, C. (2013) Persuasive messages on information systems acceptance: A theoretical extension of elaboration likelihood model and social influence theory, *Computers in Human Behavior*, 29, 264-275

Madanmohan, T.R. (2000) Failures and coping strategies in indigenous technology capability process, *Technology Analysis & Strategic Management*, 12(2), 179-189

Merleau-Ponty, M. (1999) *Phenomenology of Perception*. London and New York: Routledge.

Mols, N.P. (2001) Organizing for the effective introduction of new distribution channels in retail banking, *European Journal of Marketing*, 35(5/6), 661-686

Nielsen, J.F., Host, V., Jaensson, J.E., Kock, S. and Selnes, F. (2003) Market orientation in Nordic banks: does nationality matter? *European Journal of Marketing*, 37(11/12), 1818-1841

Mingers, J and Willcocks, L. (2014) An integrative semiotic framework for information systems: The social, personal and material worlds, *Information and Organization*, 24(1), 48-70

Ozuem, W., Howell, K. and Lancaster, G. (2008) Communicating in the interactive marketspace, *European Journal of Marketing*, 42(9/10), 1059-1083

Ozuem, W., Howell, K. and Lancaster, G. (2011) *From monolithic model to omnidirectional model: a revolution in interaction*. In: Biakolo, E., Tsaiior, J.T., Tam-George, A. and Agina, A. (2011) *Journalism and New Media Technologies in Africa*, Lagos: Nigeria.

Prince, K., Barrett, M. and Oborn, E. (2014) Dialogical strategies for orchestrating strategic innovation networks: the case of the internet of things, *Information and Organization*, 24(2), 106-127

Ratanasithi, S., Sutummakid, N. and Hemphill, E. (2013) Long-term export performance of export manufacturing firms from a developing economic environment: the case of Thailand, *Journal of Transnational Management*, 18, 309-332

Ray, S. and Ray, P.K. (2011) Product Innovation for the people's car in an emerging economy, *Technovation* 31, 216-227

Roberts, J. (2000) From know-how to show-how? Questioning the role of information and communication technologies in knowledge transfer, *Technology Analysis and Strategic Management*, 12(4), 429-443

Venkatesh, V., Thong, J. and Xu, X. (2012) Consumer acceptance and use of information technology: extending the united theory of acceptance and use of technology, *MIS Quarterly*, 36(1), 157-178

Appendix 1

SEMI-STRUCTURED INTERVIEW PROGRAMME

1. What do you think of on-line customer services in the Nigerian banking sector?
2. Has the Nigerian banking sector adequate technological infrastructure to enhance customer services in on-line environments?
3. What reasons made you decide to undertake on-line banking transactions?
4. Identify your experiences of on-line customer services in the Nigerian Banking sector.
5. When compared with face-to-face transaction, how effective are banks in responding to your queries online?
6. Do you think customer services for online environments are adequate?
7. Have you ever encountered any problems in online transactions? If so, how helpful were staff in resolving these problems?
8. What major problems exist in the Nigerian online Banking sector?
9. Have you ever used online banking or tried to access and conduct online banking transaction outside Nigeria? If so, how effective were these transactions?
10. Identity changes or improvements would you like to see regarding online banking in Nigeria?
11. Are there any other relevant topics we should have discussed?
12. Are there any further questions we should have explored?