The Role of Culture and Trust in Electronic Banking Adoption: A review

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Abstract
The reviewed paper offer insights into three critical factors namely: trust, privacy and security that could influence customer's behavior towards acceptance of e-banking in developing countries within the framework of specific cultural settings. Banks have invested heavily in hardware, software and communications infrastructures with the intent that customers would easily accept, adapt and adopt their electronic banking services. Further, banks increasingly engineer various strategies to win the customer's acceptance and adoption of the e-banking services. In spite of the measure of benefits that e-banking provides to customers and banks, acceptance and adoption in developed countries have been used to their advantage but the same cannot be said of developing countries who are lagging. The banks' managers expect that the customers would easily adopt and adapt to the e-banking scheme which is fraught with distrust, insecurity and privacy invasion. However, these approaches have not yielded the expected results as long as the adoption of e-banking is still lagging amongst the banks' customers most especially in the developing nations. The literature on e-banking and the extent to which the issue of trust, privacy and security could influence consumers' behavior have not been extensively reviewed. This paper examines a suitable framework for carrying out this review and uses it to document the state of art on the subject matter. Numerous works have researched into various determinants that would enable customers to accept and adopt new technology. With reference to these studies, the review offer insights into the relevant variables which may affect individual's trust in electronic banking in developing countries within defined cultural settings. The paper provides a robust framework for reviewing various studies in the area of e-banking with the context of how key factors influence the customers' acceptance of this technological offerings, This framework is demonstrated to document the state of the art on the subject matter.

Keywords: Culture, trust, e-banking adoption, security, privacy

1. Introduction

In recent years, Internet technology has significantly impacted our world and changed the way numerous businesses and service delivery are executed at both the corporate and individual basis. These changes have brought benefits to the different organizations including government, health, educational, commerce, banking, import and export and to their customers with enhanced products and services delivery. It has further brought windows of opportunities for various institutions to speedily carry out their business activities. Nevertheless, online transactions are plagued with the feelings of fear and anxiety amongst customers. The faceless and ubiquitous nature of the online transactions can affect the willingness of customers to engage in any form of online activity. It has become imperative for businesses around the world to retain and win customers irrespective of the nature of business, due to the competitive business world (Ramya, et al., 2014). Electronic commerce (e-commerce) have been accepted and adopted by several organizations while e-banking in its new nature has been adopted in most developed and industrialized world. However, the same cannot be said of in most developing countries (Karimzadeh and Alam, 2012). The timely adoption of e-banking in the banking sector, coupled with the government support in most Africa states is quiet significant for the banks to secure their business future. Though, this has not reflected in the uptake of their products and services by the customers.

Electronic Banking (e-banking, online banking, Internet banking) phenomenon is one of the products of the e-commerce that has been adopted by banks all over the world. E-banking products spanned from electronic fund transfer, point of sale (POS), card-present transactions to card-not-present transactions. There are fundamental reasons for the adoption and diffusion of e-banking (Pikkarainen et al., 2004) and to the banks – operating cost reduction (Sathye, 1999), account management and fund transfer, reduction of long queues in the banking hall (Alnsour and Al-Hyari, 2011), while to the customers – convenience, time saving, anywhere anytime access to account. The adoption of e-banking products and services would increasingly relegate cash to the edge of electronic grid and used predominantly within local communities for face-to-face transactions. Thus, cash-lite environment in which alternative channels of payment is maintained with minimal cash flow in the society (sodiya and Agholor, 2012).

Culture plays a role in the evolution of mankind and assists them to adapt to the environment and to their principles. Cultural issues are considered as one of the most important and effective issues in the path through which this process is applied as the technology is being advanced in most developing countries especially in Africa. Understanding cultural differences can lead to creative business operations and permanent advantage (Steenkamp Jan-Benedict, 2001). Also, the cultural orientation of an individual has influence on the trust they exhibit which

impact on the adoption and adaptation of technological products and services. In understanding this cultural phenomenon as information technology migrates from the originators to divers' cultures can create acceptance and adoption of e-banking services. The reviews of studies on the influence of culture on trust are relevant to e-banking. According to Nakhaie cited in Nejad and Nakhaie, (2011), culture is a complex of cognisance, beliefs, arts, crafts, techniques, ethics, laws, traditions, habits, behavior, and regulations acquired by an individual as a member of a community towards which the member is assigned with some responsibilities.

The review has provided a strong sense of the e-banking products, add to the customers' overall understanding of the banking products and services, likely reduce pre-adoption doubts, and mitigate post-adoption dissonance. As such, it would seem that these factors play an increasingly important role in the customer decision making process.

2. Methodology

Systematic approach in conducting an effective review in support of information systems research which comprises of three major stages – 1) Inputs (literature gathering and screening), 2) Processing (following Bloom's taxonomy) and 3) Outputs (writing the literature review) (Levy and Ellis, 2006) has been used in this study.

A qualitative content analysis of journal research papers on electronic banking in developing countries was conducted to identify categories of factors impacting or influencing e-banking adoption that have been studied, research methods that have been employed; theoretical frameworks, sampling types, sample population, countries and regions that have been studied and areas that need more scholarly attention. The papers selected for this study were limited to journal articles and few conference articles since these are peer-reviewed, and considered as the best medium by scholars to share recent and new scholarship on various topics.

3. Theoretical Background

The diffusion of innovation theory has played an important role in providing theoretical framework for the study of information technology acceptance, adoption and continuous usage by both individuals and organizations. Numerous model and frameworks have emerged to address the adoption and diffusion of information technology and its increasing applications. Most of these models analyze the behavioral aspects of the adopters such as perception, attitude and motivation, often integrating diffusion of innovations literature with other theories. Some of the dominant theories used in the field are the theory of planned behavior (TPB), as used by (Ajzen, 1985; Singh et al. 2006), the theory of reasoned action (TRA) (Ajzen and Fishbein,1980) and the technology acceptance model (TAM) (Davis, 1989; Davis 1993; Gong, 2009; Al-Hajran, Al-dalahmeh, and Aloudat, 2011); and the theory of reasoned action combined with technology acceptance model (Al-Smadi, 2012).

Today, TAM is the most prominent theory of technology acceptance in information research. Furthermore, scholars have empirically tested the robustness of the theory behaviors in a wide variety of IT related fields (Chen, 2008).

4. Concept of Electronic Banking

Banking services has always been a highly information intensive activity. The growth in information technology has affected the banking industry positively and changed the nature of financial services delivered to customers. There have been different definitions of the electronic banking phenomenon including (1) the use of Internet technology in the delivery of banking and financial services using the ubiquitous nature of the Internet (George and Gireeshkumar, 2012); (2) the act of performing financial transactions remotely over the Internet through a bank's dedicated website (Shao, 2007); (3) as the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels (Ayo, et al. 2010). Generally speaking, E-banking means providing banking products and services directly to customers through electronic, interactive communication channels. However, a more comprehensive and common definition for e-banking concept comes from the Basel Committee Report on banking supervision. The Basel Committee defines e-banking as "The provision of retail and small value banking products and services through electronic channels, such products and services can include deposit taking, lending, account management, the provision of financial advice, electronic bill payment products and services such as electronic money" (BCRBS,1998).

It is paramount for bank managers to first identify the customers most likely to purchase and adopt e-banking services and understand the factors, which influence adoption or rejection of the technological services.

4.1 The Factors influencing electronic banking adoption

Changes in banks' external environment, especially with the advent of information technology, globalization, liberalization and other national policy thrusts such as deregulation and transformation, have made banking services very challenging and the financial sub-sector highly competitive. Advancement in Internet and banking technologies have helped banks to increase their customer loyalty, satisfactions, improved growth and high returns on turn-over. Numerous scholars have shown that the perception of customers towards the use of technologies with regards to factors such as convenience, ease of use, real-time accessibility and accurate records of various transactions had advance customer's adoption of e-banking services (Sathye, 1999).

However, inadequate infrastructures, unavailable services, identity theft, frauds, and lack of knowledge, socio-cultural, legal and security are some of the factors (Okechi and Kepeghom, 2013; Leyden, 2013; Gunn, 2013; Karimzadeh and Alam, 2012; Chiemeke, Evwiekpaefe and Chete 2006; Vatanasakdakul et al. 2004) that had been identified as creating hindrances in adopting e-banking especially in developing countries. Literatures revealed that ineptness of the adoption of e-payment (which is a subset of e-banking) in most developing countries had to do with the issue of privacy, trust and security (Mohamed and Mohammed, 2012, Worku, 2010, Akudo et al., 2012, Odior and Banuso, 2012). Table (1) shows some of the identified factors which had been examined by scholars that influence the adoption of e-banking services.

4.2 Culture and Trust factors in Technology adoption

Technology adoption and diffusion are two interrelated concepts. Adoption is the process by which an individual becomes committed to continued use of an innovation. It occurs at the micro level, being the individual's decision process leading to adoption or rejection. Diffusion occurs at the macro level, being the process by which adoption spread through a specific culture.

Numerous definitions have been ascribed to culture by various scholars like Balign (1994) that conceives it in terms of its part and components (part: family, language and communication, religion, government and politics, education, transformation and technology, society, economy structures and activities (business) and the components of culture are: truth, beliefs, values, logic, rules and actions). Shein (1990) links the culture concept to the dual pressures upon human beings to face external adaptation and internal integration. Doole and Lowe (2008), defined culture as the sum total of learned beliefs, values and customs that serve to direct consumer behavior in a particular country market. However, Hofstede (1991) provides a very common set of models for international cultures and defines "culture is the collective programming of the human mind that distinguishes the members of one human group from those of another." As such, culture then concerns with a group of people who share common understanding and meaning of things around them. Further, culture is what the society has impressed on one from the basis, from which individual characteristics grow. In turn, it makes an individual unique among other members of society. This individual's cultural orientation makes them either to be similar to some people or differ from the vast majority. Culture enables us to describe the things that are common to people in a group. In sum, culture is the norms and values inculcated into individuals in a society that influences their thinking, emotion, cognition and behavior. Pizer and Hartel (2005) posits that culture has been proven to be a powerful force in organizations, as it can shape people's thoughts, behaviors and emotions within their workplace. Additionally, the authors argued that the power of culture is largely due to the emotional needs of individuals. Further, emotions are as a result of the social context in which they are elicited and in turn, influence how people feel and act in this social context. In this regard, the culture influences individuals that lead to the creation of an underlying schema embodying the sum total of underlying shared beliefs, values and norms which provide meaning in a given social system (Pizer and Hartel, 2005). Trust plays a key role in the persuasion and decision making stages through which a technological innovation passes (Kumar, Sareen and Barquissau, 2012). Also, the stage that precedes them is knowledge and awareness. Trust has been found to be important stage where risk and uncertainty exist and online environment is susceptible to a number of risks due to its virtual nature. Ali and Khalil (2013), define trust as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor irrespective of the ability to monitor or control that other party". Individuals need to be persuaded and/to make decisions toward the adoption of technology. The level of persuasion coupled with awareness and knowledge of the technology can advance the e-banking adoption. Interestingly, culture has been found to influence individual's thinking, emotions, cognitions and behavior.

The society is shaped by the cultural beliefs, norms, values and customs, which in turn shape its members. Cultural norms manifest in a given culture can be thought of as shared expectations of group members mandating how one ought to behave (De Mooji and Hofstede, 2010). Indeed, culture provides a social medium within which members can identify and form emotional bonds with each other to satisfy the needs for belonging, identity and social integration (De Mooji and Hofstede, 2010). These actions form part of the trust built among the individuals within the group. As such, culture plays significant roles in building trust on individual within the group. Thus, there is no short cut to developing individual's trust on the e-banking technology, the banks as the service providers and the government as the promoter of cash-lite society must invest time, money and a great deal of tolerance for the full adoption of e-banking by the citizens.

4.3 Trust, Privacy and Security Influence in Technology Adoption

Trust, privacy and security are keys to gaining customer approval of the e-banking products and services. Trust has been found to play an important role in the adoption of e-banking services. Trust is the foundation of relationship wherever uncertainty and interdependence exist as found in the e-banking services. Trust is very vital in online transactions because of the risk and uncertainty associated with the services and lack of physical contact of the parties involved (Popoola, 2013). Numerous definitions reveal trust as a dynamic phenomenon depending on the

environment, interaction and different factors that can be effective in trust building. Furthermore, the open network of Internet and its widespread in e-banking deployment has increased the issue of creating trust in it as one of the most critical factors. Hence the fundamental need to understand the concept of trust in e-banking.

The increasing global nature of e-banking phenomenon has highlighted the importance of multiculturalism and the new challenges in accomplishing it. Li et al (2006) stated that, that trust is a form of social relation and process which facilitates the coordination of exchanges. Trust has been conceptualized as a belief or confidence in another's reliability, integrity, credibility, honesty, trustful benevolence (Bankole, Bankole and Brown, 2011). Bankole et al. (2011) explain that culture plays a significant role in customer's behavior toward adoption of mobile-banking. Furthermore, the perceptions of m-banking are influenced by the cultural values of individuals in Nigeria. Fidelis et al. (2012) asserted that cyber criminals and hackers who attack businesses and individuals across the Atlantic have redirected their energies toward exploiting possible loopholes in the e-banking system in order to perpetuate their fraudulent acts. Incidences of impersonation (Identity theft) have become the order of the day as the ranks of cybercriminals seem to swell by the day in these countries. Cases of hackers' successful breakings into the databanks of Card Issuers and the eventual modification of the payment cards abound (Leyden, 2013; Gunn, 2013).

Arguably, these incidences would further increase the distrust of the customers of banks to adopt the e-banking services. Against this backdrop, it is important to ensure that payment cards are so secured that it would become less prone to thefts, misuse and robbery. It must have secret keys that could make it absolutely impossible for the thief to use the card. Such assurance can further create confidence and trust among bank customers in the e-banking system. Moreover, other mode of authentication of customers, such as iris, retina, fingerprint, and facial should be explored. Rehman et al. (2012) stated that the phenomenon of trust is still lacking in the payment card system. Using payment cards for any online transaction is still risky as any hacker can access the database of payment companies resulting from misuse. On the other hand, it is impossible to detect online if the buyer is the owner/holder of the payment card with the PIN code or password.

A review of e-banking adoption studies reveals that most of the studies had been conducted in the developed countries (Ali and Khalil, 2013) and Asian countries (Yuen 2013 Moga et al 2012, Wong, 2013, Harris, Guru, and Avvari, 2011, Lin and Nguyen 2011, Thaw, Mahmood and Dominic 2009, Lingyte et al 2011, Akhlaq and Shah, 2011). In contrast, limited studies have been conducted in the developing countries especially Sub-Sahara Africa (Chiemeke, Evwiekpaefe, and Chete, 2006, Gao and Owolabi 2008, Woldie et al 2008, Perkins and Annan, 2013, Ofon-Dwumfuo and Dankwah 2013). This particular gap is apparent in Sub-Sahara Africa.

Reviews of e-banking adoption studies have shown that the issues of trust and distrust; privacy and privacy invasion; technical hitches; inadequate infrastructures, knowledge and security and insecurity are inhibiting factors especially in developing countries such as Ghana (Perkins and Annan, 2013; Marfo-Yiadom and Ansong, 2012), Nigeria (Okafor and Ezeani, 2012; Olatokun and Igbinedion, 2009), Kenya (Gikonyo, 2014); Zimbabwe (Ndlovu and Sigola, 2013), Jordan (Al-Smadi, 2012; AbuShanab, Pearson and Setterstrom, 2010), South Korea (Kim. et al. 2009), Pakistan (Aslam, et al. 2011), Romania (Moga, et el. 2011), Jordan (Alnsour and Al-Hyari, 2011). If the customers do not have trust that their personal information is kept privately, payments are executed securely and only with appropriate permission, they may not adopt e-banking. Concerns about security, privacy and trust in e-banking services are inseparably connected and might still be on the increase for awhile if not urgently addressed.

Most of the studies inadvertently either overlook the issue of culture or trust which impact on personality of individuals in the adoption of e-gadgets. Bankole et al. (2012) asserted that culture plays significant role in individual's adoption of technology. Apart from that, other studies that considered ATMs as alternative banking channel of servicing their customers asserted that, the rate of adoption is highly encouraging. We argue that the results are not farfetched from what is expected. Firstly, ATMs reflect a blend of a familiar environment and culture in which these customers had operated and cash is dispensed; secondly, their trust on the self-serving device is very high as long as their transactions reflects exactly what they expects. We surmise that the cash dominance of the people is still been promoted with the ATMs delivery channel. However, sooner or later, the cash will be relegated to the corner of the digital grid. The current attention been given to the ATM and Ez-wich by the current traditional customers may be due to the changes in the current customer lifestyles and these lifestyles have become compatible to the new way of conducting banking services online. Beyond this, the use of ATMs as e-banking channel was found to be much more beneficial than across the counter transactions.

In highlighting the importance of security and trust, Alnsour and Al-Hyari (2011) states that security and trust should be integrated to technology acceptance model (TAM) constructs of perceived ease of use and perceived usefulness towards explaining customer's acceptance behavior. However, distrust, privacy invasion, insecurity, risk of hacking, and fear of incomplete transactions were found to be moderately significant barriers. These barriers pose a great reluctance on the individuals towards the successful adoption of e-banking technology. Kim et al. (2009) posits that good security improves trust and that the perceptions of good security and trust will ultimately

increase the adoption of e-gadgets. Also, both technical protections and security statements are significant factors for improving consumers' perceived security.

Van Slyke et al 2010 cited in Lingyte et al. (2011), states that 'culture has both direct and indirect impacts on the intentions to make purchase online'. Thus, cultural differences among countries and regions have been stated as an important factor on how to perceive and form their knowledge about technology and how these perceptions transform into the willingness to engage in e-commerce.

Therefore, an understanding of the factors that influence individual adoption of technology, such as e-banking is critically important practical and policy issues in the developing countries especially in Africa where culture is still relatively having strong influence on her people.

4.4 Issues Mitigating against electronic banking adoption by customers

Researchers and practitioners (Linck, Pousttchi and Wiedemann, 2006; Kambiz and Somayeh, 2012) are very much interested in the security issues in the e-banking which gives customers the required confidence/trust to adopt and use it. Numerous scholars argued on the fundamental properties such as convenience, security, authentication, non-refutability, accessibility, reliability, anonymity, speed, control and traceability (See-To, Jaisingh and Tam, 2007; Vanderhoof, 2007; Madhoushi and Mohebi, 2004) that must be found in the e-banking environment for ease of adoption and continuous usage.

With a long history of identity theft, fraud and hacking, customers tend not to trust the e-payment system and as such do not make Internet order. Al-ma'aitah and Shatat (2011) explained that without appropriate security mechanisms to control e-commerce (which is applicable to the e-banking transactions), customer's sensitive information could be susceptible to the Internet threats. Thus, these threats would affect their trust in the adption of the e-banking system.

However, without understanding what motivates the customers to adopt electronic banking services, banks may not be able to take necessary actions to increase the adoption of such services. Al-ma'aitah and Shatat (2011) added that Internet users are worried and unwilling to send sensitive information through the Internet. To improve on the exchange of information and electronic payment, the barriers that restrict information sharing has to be broken. Al-ma'aitah and Shatat (2011) argued that when the volume of transaction increases, the level of the associated risk would also increase. Hence the need to ensure the security of data and the system itself to protect the customers' information so as to increase the customers' trust on the system. Most customers seek to complete their transactions with e-banking and gain from the associated cost saving and convenience But at the same time, they need appropriate security system to ensure that during the financial transactions and the e-payment processes, all customers' information can be protected. Also, the privacy of the customers must be guaranteed. It behooves on the banks that the e-banking technology need to provide security mechanisms as sufficient safeguards whereby public perception of the e-banking customers can be gained.

The increasing rate of data breaches within the e-banking system has drawn the attention of both practitioners and scholars. The term "data breach" generally refers to incident in which sensitive, protected or confidential data has potentially been viewed, unintentional exposure, disclosure, stolen, or used by an unauthorized individual. In February 2005, the data broker ChoicePoint disclosed a security breach involving the personal information of 163,000 persons. In 2006, the personal data of 26.5 million veterans was breached when a VA employee's hard drive was stolen from his home. In 2007, the retailer TJX Companies revealed that 46.2 million credit and debit cards may have been compromised during the breach of its computer network by unauthorized individuals. In the end, over 94 million accounts were affected. TJX was subject to several class action lawsuits on behalf of both customers and financial institutions who suffered fraud losses as a result of the breach.

In 2008, the Hannaford supermarket chain revealed that approximately 4 million debit and credit card numbers were compromised when Hannaford's computer systems were illegally accessed while the cards were being authorized for purchase. In 2009, 130 million records from credit card processor Heartland Payment Systems Inc. of Princeton, N.J., were breached. Also, in 2009, personal information from Health Net on almost half a million Connecticut residents and 1.5 million patients nationally was breached. In 2011, another breach of patient data occurred when data for 20,000 emergency room patients from Stanford Hospital in California was posted on a commercial website for nearly a year. In late April of 2011, Sony, Inc. shut down its online PlayStation Network (PSN) in response to a data security breach. In January 2012, New York State Electric & Gas and Rochester Gas and Electric, subsidiaries of Iberdrola USA, sent notices to customers advising them of unauthorized access to customer data on the companies' customer information systems, which contained Social Security numbers, dates of birth, and financial institution account numbers. The 2013 Target data breach compromised the credit and debit card account information of as many as 70 million Target customers over the holidays. Neiman Marcus disclosed a breach in January 2014 that involved 1.1 million credit and debit cards. Arts-and-crafts-supplies retailer Michaels Stores recently disclosed that a data-security attack on Michaels that may have affected its customers' payment card information.

Consequently, in critiquing works on the benefits and adoption of the e-banking system, we aligned with the position of Kim et al (2009) that the threats are on the

increase all over. It seems obvious that the volume of data breaches and the publicity on the media has consequently led customers to lose trust in the e-banking system. This is especially prevalent in the developing nations of the sub-Saharan Africa that are undergoing difficult economic times. At the same time, there is a large army of unemployed, but very intelligent young men and women in these nations who are unemployed youths and are thus susceptible to venture into the world of e-banking frauds.

The key areas of concerns for the customers about the Internet had been the issues of privacy, trust and security. Also, the question of "how attitude towards elements of existing banking service might influence the customers' decision to use the Internet banking" has not been fully investigated in the developing nations. Furthermore, the issues of poor infrastructural facilities are key, so is level of computer literacy as well as the socio-cultural constraints that had not been addressed and thus need further investigation by researchers. Srivastava (2007) stated that the consumers' perception can be changed about the adoption of the electronic banking by awareness programme, friendly usage, less charges, proper security and by best response to the services offered.

Thorton consulting cited in Flavian et al. (2006) argued that the non-existence of security is one of the major factors inhibiting the adoption of Internet banking. Flavian et al. (2006), posits that the issues of customers' earnings, maturity and genders contributes in influencing their intentions to adopt the Internet banking. However, Yap et al. (2010) clearly stated that quality of the conventional banking services would influence the customers' confidence in the online banking system when introduced.

Arguably, the use of trial-and-error approach to the understanding of the e-banking functions would be too expensive for the customers to comprehend. More so that most of the customers are not knowledgeable about the e-banking while a number of them are unbanked. The cost of security breach by attempting trial-and-error approach may be exploited by the cyber criminals for their benefits (Zanoon and Gharaibeh, 2013; Sathye, 1999). In carrying out the Internet banking properly, a basic knowledge of computers and the Internet is required. This knowledge gap could definitely limit the number of people willing to utilize this facility. Furthermore, customers that desire to use the Internet may find it to be time consuming. The crux of the matter is that people find it difficult to trust a completely mechanized system, especially on financial matters. In many instances, a simple mistake like clicking a wrong button may create a big problem (Zanoon and Gharaibeh, 2013).

In contrast to the e-banking method, the traditional banking system is considered a laborious task and an impersonal service (Harris and Spence, 2002). Likewise, Hennigan and Gourvennec (1996) have analysed that electronic banking can further "dehumanize" banking activities because of the absence of social and personal contacts. In addition to this, several studies have focused on security issues and the outcome affirms the fact that customers are reluctant to avail themselves of this service due to cyber threats and data breaches. In other words, they have doubts about the security and they fear possible embezzlement of funds (Courchane et al., 2002; Redelinghuis and Rensleigh, 2010; Khare et al., 2012, Al-Smadi, 2012). Also, the absence of enabling electronic laws to prosecute the cyber criminals contributes to the increase in cyber-crime in most developing countries. The state of poor public confidence in the Internet security system, trust and privacy guarantee, remain big issues that are yet to be fully addressed. Although some of the enabling laws have addressed some of the threats but a lot needs to be done.

4.5 Cultural Influence on Personality

According to Ayouby, Croteau and Raymond (2013), culture has strong influence on cultural identification. Cultural identification has been defined as "the existence of specific sets of values and beliefs in which specific human groups recognize them." Also, that cultural identification is at two levels – national and ethnic, national which is historical territory and the ethnic has to do with the community. The authors asserted that culture has strong influence on the cultural identification. However, the cultural identification was seen as the personality trait of individual. According to Lekhanya, (2013) individuals' actions and perceptions are based on the trust level found within the culture and that the norms and values systems influences individuals within the community. Furthermore, the long-term underlying characteristic organizes an individual's cognitions, emotions and behaviors towards decision-making. Thus the impact of culture can be felt in the individual that are raised in the community.

Table 1: Recent Factors and Models used in e-banking adoption

Reference	Factors	Model	Analysis Method	Findings
Ali S. A. and Khalil M. N. (2013)	Perceived relative advantage Perceived ease of use Trust Attitude Behavioral intention	TAM	SEM	Perceived relative advantages, perceived ease of use, trust of the Internet banking all impacted attitude towards intention of adopting Internet Banking. Also that the Internet Users and ease of adaptation in the developed nations aids their intention to accept electronic banking.
Takere, Y. and Sira, Z. (2013)	Attitude, subjective norm, perceived behavioral control, perceived usefulness, perceived ease of use and perceived risk	TAM, TPB	Regression	Attitude, subjective norm, perceived behavioral control, perceived usefulness, perceived ease of use and perceived risk were significant in affecting users' intention to use the e-banking service channels.
Yuen, Y.Y. (2013)	Performance Expectancy, Effort Expectancy, Social Influence; Facilitating Using Internet Banking; And [Gender age effects on e-banking acceptance] cultural comparison between The US and Malaysia			Adoption of e-banking (accessibility, convenience, security, privacy, content, design, speed, fees and charges) had a positive effect on Jordanian Commercial Bank customers' satisfaction, loyalty, and positive WOM.
Juwaheer, T.D., Pudaruth, S. and Ramdin, P. (2012)	Perceived ease of use, perceived usefulness, subjective norms, attitudes, behavioral intentions, security, trust and security, level of e-banking awareness and demographic variables such as age, income, gender, and education	TAM,TPB and TRA	ANOVA and Correlation	Perceived ease of use and perceived usefulness have a direct influence on the adoption of Internet banking in Mauritius. Also both trust and security have significant impacts on the e-banking adoption in Mauritius. Furthermore, the level of education and income level of the respondent may be a major determinant in influencing the adoption of Internet banking.
Clemes, M.D. Gan, C. and Du, J. (2012)	Convenience, user-friendly website, Internet access/Internet familiarity, marketing communications, word-of-mouth, perceived risks, price, self-image and demographic characteristics	Logit Focus Groups	Multivariate	User friendly, website, perceived risks, price, Internet access/ Internet familiarity were found to impact on customers' decisions to adopt internet banking. Further customers in the young age with high income groups are more likely to adopt Internet banking.
Harris, H. Guru, B.K. and Avvari, M.V. (2011)	Flexibility, Functionality, Data management and Privacy and security			Flexibility was found to be the most significant followed by functionality and data management whilst privacy and security least significant that influence user's decision in electronic environment.
Karimzadeh and Alam (2012)	Infrastructure, Legal and security, Knowledge, Socio-cultural, Economic, Management and Banking		Correlation, t-test, ANOVA and Friedman test	Legal and Security, Socio-cultural and management and banking issues were challenges for the development of e-banking with less awareness among the customers

5. Discussion and Conclusion

This paper has explored the role of culture and trust in electronic banking adoption in the developing countries. In order to be successful, banks are keen to understand to what extent customers are utilizing e-banking services. Furthermore, the banks are interested in identifying the reasons why non-adopters are not using the e-banking. The banks are gaining more customers into their databases, surprisingly, the use of e-banking services stays at the lowest amongst their facilities. Privacy and security, which are part of trust issue, are found to be most important issues that discourage customers from utilizing e-banking services in the developing countries.

Trust is highlighted as a major factor that leads to adoption of technology. Additionally, the road to trust in individual has been found to be influenced by culture. However, the developing countries relies more on physical money and face-to-face relationships and mediation to exchange money, which had been their mode of building trust. The introduction of cash-lite environment would need further enlightenment among the citizens and moderately given time for the migration. The level of trust found in relation to the adoption of ATM is sequel to the nature of cash dominant society which they are use to with a significant difference of not interacting with human but machines.

Through survey related literature, it was found that most recent studies asserted trust, privacy and security as some of the most impediments to the accepting, adapting and adopting of e-banking products and services. Understanding the cultural settings of the domain of siteing banks should encourage the adoption of e-banking, since culture has influence on the personality of customers. In the studied reviewed, basic pattern with regard to the determinants of culture, trust and security were found. Further, trust has been found to impact on the intention and attitude towards the adoption of the e-banking services. Also, some of the factors found to be significant in explaining individual's adoption of technology are trust, socio-culture, privacy, knowledge, relative advantage or perceived usefulness, perceived ease of use, and perceived risk. The use of TAM model as a theoretical foundation towards investigation of e-banking technology adoption cannot be over-emphasized.

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