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Empirical Review of the Challenges of the Cashless Policy Implementation in Nigeria: A Cross-Sectional Research

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Abstract. Since the implementation of the cashless policy on January 1st, 2012 in Lagos state which is aimed at reducing the high cost of cash production, circulation and distribution in Nigerian economy, the set-out goals have not been fully achieved due to several on-going challenges. This survey research was conducted to review challenges of the cashless policy implementation in Nigeria and to identify factors that influence the adoption of electronic payment for exchange of value. The Unified Theory of Acceptance and Usage of Technology (UTAUT) was employed to identify various challenges from data gathered through questionnaires distributed to different stakeholders in the economy. A total of 410 questionnaires were collected and the research work adopted used Partial Least Square (PLS) method and used SmartPLS software during the data analysis. The attendant findings were pivotal to understanding the challenges encountered in implementing cashless policy in Nigeria. Using UTAUT we measured the significance and impact of Social Influence, Facilitating Condition, Effort Expectancy, Performance Expectancy and Behavioural Intent to Use on Actual User Adoption. From the result, facilitating conditions has no direct effect on actual system use and trust has no positive effect on behavioural intention to adopt the system. This study shows that despite the implementation of this policy, a lot of users are still being faced with various challenges and more efforts are still being required to achieve an effective cashless society.

Keywords: Cashless Policy, UTAUT

1. INTRODUCTION

Cashless policy is an economic policy aimed at reducing the amount of produced currency in the economy, it involves more electronic-based payments. A Cashless economy is an environment in which money is spent without being physically carried from one person to the other [1]. Types of cashless payments include direct debits, credit transfers, cheques and payment cards. A high percentage of un-banked population in Nigeria is responsible for the high amount of cash in circulation [2]. From the technology and business perspective, cashless economy is more efficient and productive [3].



With the increase of Fintech companies globally, the use of technology and innovative business models in financial services has been on the increase thereby providing alternative financing opportunities for enterprises. Mobile money- “money that can be accessed and used on mobile devices” are a viable means of implementing cashless policy in an economy. Positive effects of cashless policy as identified by [1],[4] include prompt settlement of transactions, reduction in frequency of visits to banks, stimulation of cashless policy, and reduction of theft, among others. Right from the inception of the Cashless Policy in Nigeria by the CBN in 2012, there has been an increase in the use of the channels aimed at making it a reality which ATM, NEFT, POS, NIP, USSD and MOBILE Banking. The progress made in implementation cannot be ignored or overemphasized as there have been a substantial progress in the banking sector due to the ease and convenience the policy has brought in Nigeria.

The suspension of the policy on 6th January 2013, stopping it from leaving Lagos state to other states [5]. It was later resumed but that act baked the question if Nigeria was prepared in the first place to commence implementation of the cashless policy. Many Nigerians still believe there is more to be done to gain their confidence or trust in these so-called alternative channels supplied by banks to aid banking transactions, as there seem to be challenges with the system [6]. From [7], some see it as a bitter-sweet experience that maybe worsened but have no choice than to use it for business continuity. Others commended the initiative and await to see more opportunities unfold due to the emergence of the policy.

The goal of this study is to review the ongoing challenges of the cashless policy implementation in Nigeria and to identify the factor influencing the adoption and use of electronic payment platforms. The significance and impact of social influence, facilitating condition, effort expectancy, performance expectancy and behavioural intention to use is sought to determine level of actual usage of the cashless policy using UTAUT. The rest of this paper is arranged as follows: section two presents the literature review on cashless policy implementation. Section three presents the research model and hypothesis, section four presents the research methods and data analysis, section five presents discussion of results, section six presents the conclusion of the study.

2. LITERATURE REVIEW

2.1 Cashless Policy

Cashless policy entails an economic system with reduced circulation of physical cash in circulation. This policy took effect on January 1st, 2012 in Nigeria with Lagos as its pilot state. The objectives are; to boost and modernize the system of payment in Nigeria in line with Nigeria’s 2020 vision to rank among the best economies of the world by 2020, peddle high cost of banking services to its minimum, while driving financial inclusion of all the citizens by fostering and setting needed policies to manage growth and inflation [8]. The definition of the policy dictates that cash withdrawal across the country should not exceed N5, 000,000 for individuals and N3, 000,000 for corporate customers. Any withdrawal above that would be charges at 3% and 5% for individual and corporate customers respectively. Further study reveals a 10% boost in payment system would affect the Gross Domestic Product (GDP) by about 1%. Thus, an efficient payment system would foster national growth [9] [10].

A successful implementation and adoption of the policy will achieve the reduction of cost of production, processing and distribution of cash in the economy [8]. More benefits highlighted by [11], [12] and [13] are; Cashless policy implementation and adoption will minimize fraudulent activities such as money laundering, robbery activities, and physical loss/destruction fire outbreaks. To the government, cashless economy will facilitate increased tax collection, reduced revenue leakages and broad economic development. With the prevalence of alternative financial and payments infrastructure such as POS systems, mobile payments, direct debits, internet and electronic banking, etc. in the cashless economy, more employment opportunities and benefits for stakeholders in the field.

2.2 Patterns of Cashless Policy Implementation

The cashless initiative is cash transactions through electronic means using information and communications technology (ICT). [14], referred to it as the coming trend for business especially those in the industrial sector. This technology goes beyond the computer, it covers other activities. Applied in different forms, they include the following but not limited to:

- Digitization of stakeholders account services, like storage and withdrawal.
- The use of Automated Teller Machines (ATMs) in withdrawal and deposit of funds.
- Internet banking and inter banking transactions.

It further involves the use of credit cards, debit cards, mobile pay and many other forms of payment, but always only in digital ways, as paper currency does not come into play.

[15]noted seven modes of electronic payment in Nigeria, ranging from the Automated Teller Machines (ATM), inter-bank branch, kiosks, and points of sales terminals, mobile voice and web. [16]noted the ATM creates a platform that permits customers to access their accounts through any ATM nationwide or worldwide as the case may be. In this economy, payment for transactions can be done by any one of the forms of electronic payment channels in cashless economy which includes the use of credit cards or bank transfer. According to [17] Cashless economy is promoted by certain aspects of e-banking such as e-brokering, e-money and others.

The CBN introduced Point of sale (POS) and gave the mode of operation in 2011 limiting the role of connecting and maintaining POS devices only to licensed Payment Terminal Service Providers (PTSPs). These POS terminals are engaged in similar patterns as the ATM, across commercial points in the country. The monetary value of the transaction carried out is transferred to the seller instantly via the POS.

In Nigeria today, private enterprise, religious bodies, educational institutions and other service providers such as hotels, transport firms etc. have embraced the POS option in their transactions. The banks provide the customers with cards, attached to their accounts. These cards can be used on the ATM and POS devices to make and carry out transactions. It provides the needed means of authentication and verification, needed to deduct money from the customer's account [18].

It can be used for several payment transactions. The aspect of cashless policy streamlining the permitted limits of cash transactions for individuals and institutions beyond which charges apply cover all accounts types especially savings and current, do not apply to micro-finance bank and government related accounts.

Banks have equally made available different types of cards to enhance the electronic transactions which consist of Verve, Master, Platinum cards. It is good to mention that these e-transactions are not without charge. This policy facilitates fund transfer, thereby reducing time wasted in bank(s). The transactional ease and other advantages of cashless economy may explain its growing popularity.

The success of M-PESA in Kenya has been attributed to its flexibility enabling users to carryout financial transactions despite distance with their cell phones, thereby reducing their travelling costs, bank charges and ensuring safety of money by eliminating physical cash in transit [19].

2.3 Challenges and Drawbacks of the cashless policy

According to [20], the change from cash based economy to cashless economy moved people inconvenienced the stakeholders, especially the populace, due to lack of understanding and proper guidance on its implementation. These has hampered the adoption and fuelled conspiracy theories among stakeholders. [21] stated that *“There are several complaints from different quarters that sufficient facilities have not been provided to make the system smooth. The e-payment system is said by many who have tried to use it to be filled with hitches. Sometimes, one is charged for service not successfully rendered. There are, therefore, fears of possible loss of money through fraud, meanwhile, information security experts have confirmed that the infrastructure supporting the cash-less system in Nigeria may be 60% vulnerable to fraud”*. 68.2% of those that participated in a poll admitted that the long queues in the banks were not comfortable, while another 28.9% described the teller officers as having bad attitudes (cashiers) and some 2.89% spoke of long distance to banks [22], these and probably others facing the financial institute in the country led to the cashless policy. In this section we would look at recent challenges facing the institute with respect to the cashless policy.

For the cashless implementation to succeed, there is need for a blend, notable improvements in infrastructure being matched with right policies that will be assessed at intervals, in order to capture the current state of the economy as it adapts to the policy [23]. This tends to discuss, regarding the level of security and literacy [24] while other trivial but nevertheless bordering challenges that hinder this policy and total implementation would be further looked into.

2.3.1 Infrastructure

The use of e-cash, commonly known as “cashless” contains challenges that are readily amplified by the inadequacies of physical infrastructure [25]. Access to the internet at affordable price is poor and the lack of credible energy utilization (power supply) has led to a series of challenges of its own as regards e-services [24]. Other infrastructure and services that are related to the policy and are inadequate in supply include the Point of Sale (POS) terminal, Automated Teller Machine (ATM), Mobile banking [24].

[21] referred to Lagos as a population of about 17 million people and yet it had about 61 POS, 24 ATM and 20 banks per 100,000 people. This figures are not sufficient to handle such a population. The deployment of Point of Sale (POS) machines are limited in supply. Demand

for it by the general public is higher than the supply from the various banks. This is not enough to meet the needs of the populace. As stated in [26], by a concerned trader, the challenges not only have to do with the inadequate terminals but the high rates charged by banks on each transaction done.

2.3.2 Security

Security is pivotal in the emergence of the cashless policy and can be a deterrent if not handled well [25]. [43] report reveals the first year of the scheme saw diverse fraudulent activities reported. These compromise the integrity of the monitoring bodies in Nigeria. In the CBN annual report of 2017 [27] a record of 25,043 fraud cases were raised as opposed a reduced rate of 19,531 in 2016 in which some of the funds were recovered.

EzeocheIghile a business day journalist from an interview on the streets of Lagos gathered that security measures at the cash points are very loose. OgonnaMaduka, a resident of Independence Layout, Enugu, said concerning security issue that it is not safe to use the ATM machine around her residence as some so called “Smart boys” could empty your account or even harass you physically. Some respondents were of the view that a lot can still be done in terms of security at cash points. An anonymous respondent said: I cannot use the ATM at night; the place is poorly lit [28]. [29] also stated the lack of security at ATM locations that make it easy for ill meaning individuals to carry out their acts without arrest. The banks have taken a step further by educating their customers on the need to protect their Personal Identification Numbers and ATM cards to reduce the menace of fraudsters. Announcements and text messages are been sent daily to aid this.

In spite of the challenges, Nigerians are beginning to trust the system. The half year economic report of 2018 by [27], shows “The volume and value of electronic payments increased to 953,176,045 and N62, 815.57 billion at end-June 2018, respectively, compared with 829,422,069 DRAFT 7 and N52, 650.19 billion at end-December 2017, representing an increase of 14.92 and 19.31 per cent, respectively”.

2.3.3 Literacy

[25] Stated in his research, high illiteracy is another factor that has negated the spread of the e-payment policies. [30] showed that we have only 59.6% Nigerian’s that are literates judging from the age of 15 and above that can read and write. This is to say 40.4% of Nigerians are illiterates. The low level of literacy also affects the business community, a sizeable number from amongst them do not go to the bank to access banking services [31]. Beyond basic literacy such as reading and writing, the citizens should possess basic ICT know how, to help them comprehend the modalities of e-payment.

[31] noted another form of literacy that is lacking, financial literacy. Most adults do not understand it, hence are at a loss to actively participant in financial policies. Financial literacy, involves understanding how money works, its management pattern, how it’s earned, how to invest money. Many people in the country lack banking culture as a result they save by crude and informal means, while some lack access to banking services; for such people, e-transaction is a mere story [20].

3. Research Model and Hypotheses

3.1 The Research Model

In this review the Unified theory of acceptance and use of technology (UTAUT) is the model to be used. UTAUT is a common subject of discussion in various disciplines. Its heighten level of exploration by researchers has led to it been accredited among the mature areas of exploration [32].

UTAUT particularly borrows some of its concept from the Theory of Reasoned Actions (TRA), The Theory of Planned Behaviour (TPB), the Technology Acceptance Model (TAM) and a few others [33].

Accordingly, the UTAUT model posits that the acceptance of technology is based on factors such as social influence, effort expectancy, facilitating conditions and performance expectancy [34]. These constructs depicts the behavioural intent of the consumer and also tells on the usage habit. There are other construct that acts as moderators to a UTAUT model, such as age, voluntariness, gender and experience. The cashless policy is aimed at efficiency in payment system, through increased speed and portability, the way these are seen and utilized by the user determines its success [35].

Fig. 1. Models the UTAUT aspects and the adjustment, adopted by this research work. The model has five constructs, with the addition of trust to the original model. The moderating factors utilized in the model were not used during the cause of this research work.

Performance expectancy is the degree to which a technology user perceives the technology as aiding in his job performance [34] [35]. Effort Expectancy is the ease associated with the use of a technology to be or that is implemented. Social Influence refers to the external influence other users of a technology has on the customers use of a new system [36]. Facilitating Conditions, deals with the availability and easy access by an individual to the organizational and technical structures available to support the use of a system and removing barriers to the usage of a system[34] [37].

Trust ascribes the level of reliability placed on a system by a user. It depicts the likelihood that a technology would not be adopted if the customer does not feel secure in the use of such technology for his transactions.

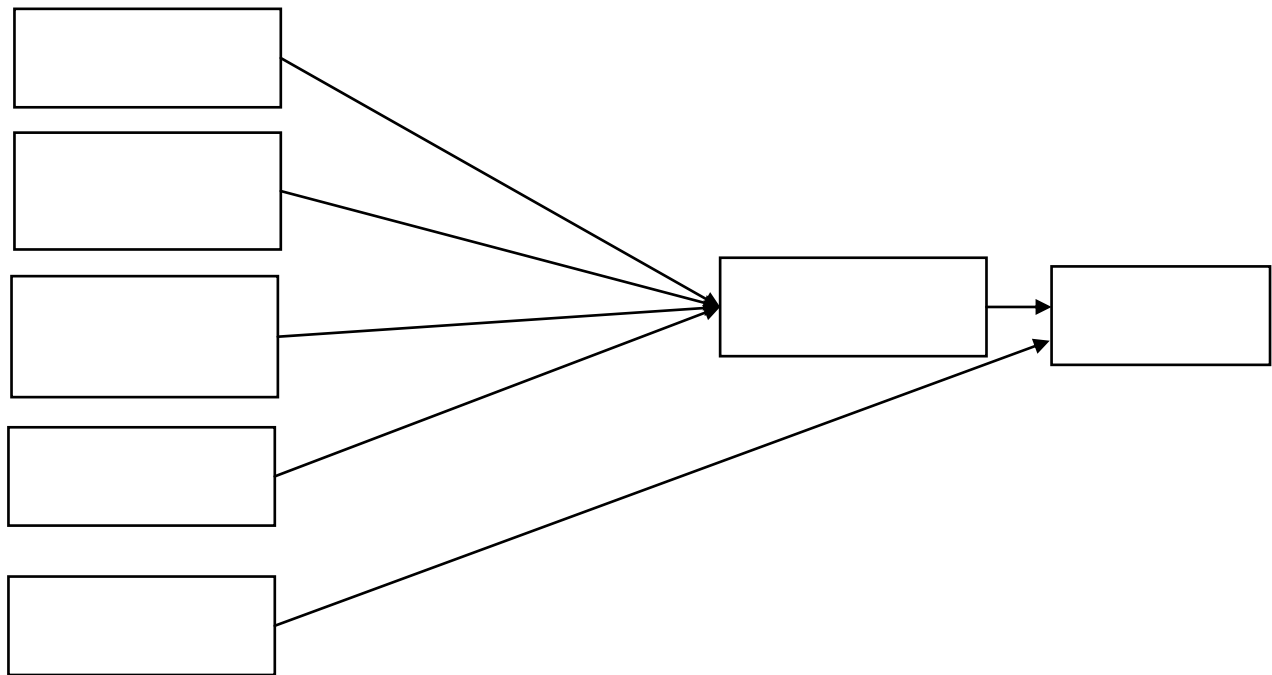


Fig 1: Modified version of UTAUT

3.2 Hypotheses

We expect to statistically analyse them using the UTAUT model. Notwithstanding the following hypotheses are advanced based on the projections from the UTAUT model.

Hypothesis 1: Performance expectancy from the e-banking system has a direct positive influence on the behavioural intention to adopt the cashless policy.

Hypothesis 2: There is a positive influence between effort expectancy towards the e-banking system on behavioural intent to adopt the cashless policy.

Hypothesis 3: Social influence has a positive influence on behavioural intention to use the cashless policy system.

Hypothesis 4: Trust has a positive influence on the behavioural intention to use the cashless policy system.

Hypothesis 5: Facilitating conditions positively influences the behavioural intention to use the cashless policy system.

Hypothesis 6: Behavioural intention to use positively affects the adoption of the cashless policy among stakeholders in the economy.

3.3 Data Collection

A total of 410 respondents partook of the survey. The questionnaire variables include age group, gender, occupation, educational status and the basic UTAUT constructs questions

gotten from [38]. The data collection lasted last for three weeks between October and November 2018. The respondents' responses were measured using a five point Likert scale ranging 1 (completely disagree) to 5 (completely agree). Data was collected in November 2018.

4.0 Results and analysis

4.2 Data Analysis

The tables below show the demographic characteristics of 410 respondents that partook of the survey. They included 53.2% males and 46.8% females from the across Nigeria using both online and paper questionnaires. The most participating age group in this survey was the 18-25 years with a percentage of 46.8% and the least group was the 51 years and above with only 1.2%. Over 44.1% of these respondents are employed while 30.5% are students. Focusing on the educational status a percentage of 53.7% being tertiary graduates and 42.9% are post graduates which shows a high percentage of literates as respondents.

Table 1. Respondents' details

VARIABLES	ATTRIBUTES	SUM	PERCENTAGE (%)
GENDER	Male	218	53.2
	Female	192	46.8
AGE GROUP	18-25	192	46.8
	26-35	149	36.3
	36-50	64	15.6
	51 And Above	5	1.2
OCCUPTION	Student	125	30.5
	Employed	181	44.1
	Self Employed	90	22.0
	Unemployed	12	2.9
	Retired	2	0.5
EDUCATIONAL STATUS	Primary	0	0.0
	Secondary	3.4	3.4
	Tertiary	220	53.7
	Post Graduate	176	42.9

5. Results

This section outlines the tests carried out in order to establish the construct reliability and validity of the data set. The extended UTAUT model adopted, consist of seven constructs – performance expectancy, effort expectancy, social Influence, trust, facilitating conditions,

behavioural intent to use and Actual system use. The research work adopted Partial Least Square (PLS) method for data analysis using SmartPLS 3.0.

SmartPLS software functions well in modelling components and paths based on the PLS method [39]. It was adopted due to its capacity to handle many independent variables, and adapt its implementation to suit, either as a regression model or a path model. SmartPLS in recent times is a common implementation tool in path modelling.

The reliability of data gotten during the data collection, was assessed based of different reliability measure such as the Composite Reliability (CR) and the Cronbach's alpha of each construct. Acceptability of Cronbach alpha is from 0.6 and above [40],[41]. Acceptable range for the composite reliability is 0.7 and above, it is regarded as more reliable and accurate test of validity and reliability, for a data [42]. Table 1 reveals the CR values gotten after the calculation, ranging from 0.770 to 962. The Cronbach's alpha ranging from 0.469 to 0.932.

The Cronbach alpha figures are within the acceptable range 0.70 – 0.95, except for three constructs. The behavioural intent to use and effort expectancy are further accepted based on their proximity to 0.70. The actual system usage construct is accepted due to its composite reliability value that fall within acceptable range [42],[43].

Table 2. CR, AVE, and Cronbach's Alpha

	Cronbach's Alpha	Composite Reliability	AVE
Actual System Use	0.469	0.770	0.634
Behavioural Intent to Use	0.673	0.857	0.750
Effort Expectancy	0.673	0.859	0.754
Facilitating Conditions	0.853	0.909	0.770
Performance Expectancy	0.932	0.957	0.881
Social Influence	0.733	0.850	0.658
Trust	0.922	0.962	0.927

The validity of the research instrument was tested using confirmatory factor analysis (CFA) and convergent and discriminant validity. All the question items have acceptable factor loading above 0.70 as indicated in Table 2 except one with 0.636. It was however, retained in the analysis due to closeness of the value.

Table 3. Factor Loading

Construct	Item	Description	Factor Loading
Actual System Use	AU1	Use of ATM cards	0.636
	AU2	Make payment using e-payment	0.930
Behavioural Intent to Use	BI1	Where banking transactions are done?	0.825
	BI2	e-banking and financial accountability	0.906
Effort Expectancy	EE1	Interaction with e-banking platform	0.872
	EE3	Learning to use e-banking platform	0.864
Facilitating Conditions	FC1	Necessary knowledge needed to use e-banking platform	0.884
	FC2	Access to the resources needed to use e-banking platform	0.890
	FC3	Similarity of e-banking application to other applications	0.858
Performance Expectancy	PE1	How e-banking helps to utilize banking services	0.913
	PE2	Using e-banking services saves more time	0.956
	PE3	The ease in making transactions with e-banking	0.946
Social Influence	SI1	The influence people have on my use of e-banking platforms	0.648
	SI2	How occupation supports the use of e-banking platform	0.868
	SI3	Institution influence on the use of e-banking	0.895
Trust	T1	Trust for the e-payment platform	0.971
	T2	Recommendation of e-payment to someone else	0.954

In evaluating discriminant validity, the AVE analysis was carried out, the square root of the AVE of each construct must be larger than the correlations of this construct to all the other constructs [43]. Table 3s shows the discriminant validity of the constructs, all have acceptable value and the square root of AVE for each construct is greater than the correlation with other constructs.

Table 4. Construct correlations and square root of AVE

	AU	BI	EE	FC	PE	SI	Trust
AU	0.796						
BI	-0.261	0.866					
EE	-0.135	0.538	0.868				
FC	-0.141	0.641	0.574	0.877			
PE	-0.280	0.644	0.582	0.708	0.939		
SI	-0.200	0.607	0.470	0.674	0.731	0.811	
Trust	0.437	-0.256	-0.161	-0.183	-0.309	-0.262	0.963

5.1 Hypotheses Testing

After assessing the reliability and validity of the model, the hypotheses proposed for the research work based on the model were examined. The path significant levels were examined using a bootstrap with resamples. Table presents the t-values, p-value and status of the hypotheses. The outcome shows H5 and H4 were not supported, indicating that Facilitating condition has no direct effect on Actual system use and Trust has no positive effect.

Table 5. Hypotheses Testing

Hypotheses	t-values	P values	Supported
H1: Performance Expectancy =>Behavioural Intent to Use	4.719	0.000	Yes
H2: Effort Expectancy =>Behavioural Intent to Use	5.012	0.000	Yes
H3: Social Influence =>Behavioural Intent to Use	4.583	0.000	Yes
H4: Trust =>Behavioural Intent to Use	1.474	0.141	No
H5: Facilitating Condition => Actual System Use	0.559	0.576	No
H6: Behavioural Intent to Use => Actual System Use	3.409	0.001	Yes

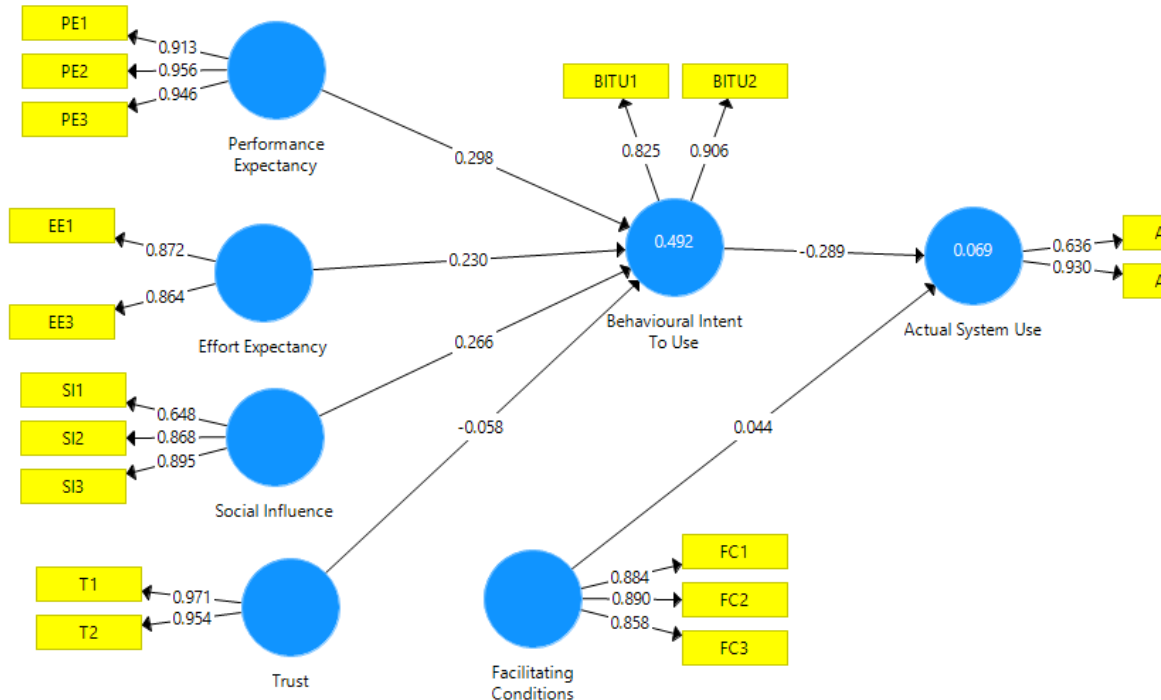


Fig 2: Path Analysis

6. Discussion

Performance expectancy from the e-banking system has a direct positive influence on the behavioural intention to adopt the cashless policy. The result from the hypothesis testing supports the first hypothesis. Suggesting that performance expectancy meaning the ease and time saving effect e-banking gives to accessing banking services positively affects the behavioural intent of the user to adopt the cashless policy. Hence, stakeholders are more inclined to use e-services for banking because of its ease. Recent innovations and introduction in the scheme since its implementations, such as the mobile (USSD) platforms, engenders use of e-banking services outside internet coverage. This has contributed to the rise in use of the policy. There is a positive influence between effort expectancy towards the e-banking system on behavioural intent to adopt the cashless policy. The effort needed to participate in e-banking is relatively easy and according to the result from the hypothesis testing, it encourages the user and stakeholder to participate in the cashless policy proposed by the central bank of Nigeria.

Social influence has a positive influence on behavioural intention to use the cashless policy system. The result analysis further supports Hypothesis 3, acknowledging that social influence has a positive influence on the stakeholders' intention to adopt the cashless policy implemented by the central bank of Nigeria. Behavioural intention to use positively affects the adoption of the cashless policy among stakeholders in the economy. The last hypothesis is supported by the data analysis. Meaning the stakeholders intent to use the services provided more often end in the use of such services, hence, it positively affects the users' adoption of the cashless policy. [44], in his work on the acceptance of e-banking also stated same, the performance expectancy, effort expectancy and social influence contributes positively to the behavioural intent to use the new system and that in turn significantly affects the actual use of the system.

Trust has a positive influence on the behavioural intention to use the cashless policy system. According to the data analysed and gotten from the survey, the trust factor has no positive influence on the use of e-banking services. This is due to the adoption of the policy by banking institutions, hence, customers have little or no option than to participate in it, if they would carry out their transactions. Facilitating conditions positively influences the behavioural intention to use the cashless policy system. Facilitating condition, another variable in the hypothesized model is not supported as a factor that encourages the use of the e-banking services. The questions asked here refer to the user knowledge and access to resources of e-banking platforms. The analysis highlights that users despite not being vast in their knowledge of the e-banking platform or having direct access to its resources, still go the extra mile to engage in it, because of its necessity.

[45], in their studies noted that the culture and country differences affect the UTAUT constructs, with varying results occurring from different contexts on similar matters. These assertions support our research findings that the need for stakeholders to use the policy outweighs its lack of trust and its unavailability in their immediate environs. The data description provided reveals ample of the participants in the questionnaire are employed, hence the need to utilize this policy due to the positive influence from social variables another paper that shows lack of significant effect for facilitating conditions in accepting technology is [46].

6.1 Limitation and Future Research

This investigation was not without its limitation. The scope of data collection was limited to the general experience of the respondents. The questionnaires were unable to capture responses of challenges from each channel which includes ATM, NEFT, POS, NIP, USSD and MOBILE Banking.

These challenges faced such as long queues, poor internet access, unavailability of POS at Purchase centres, transaction difficulties, poor knowledge of how to use the cashless options, regular malfunctioning of machines causing cards to get stuck, non-functional machines etc. may need to be investigated for future research purposes which will go a long way to facilitating the realization of a cashless economy.

6.2 Recommendations

The research came up with some conclusions based on the data. The performance expectancy, effort expectancy and social influence came out as factors that positively affect the actual usage of the system. Based on this we have some recommendations.

The ease with which e-banking services deliver should be improved on, authentications needed for transactions should be abridged and yet authentic. Things like biometric identification at ATM that skip the need for pin numbers should be worked on. Another innovation that would help is synchronizing all the accounts to the biometric identity of the person. Where the person uses his finger print and all accounts pops up and the user proceeds with his transaction. This would minimize the use/theft of ATM cards and provide ease of banking.

Creating an awareness program for both literates and non-literates is a major way to encourage the use of the system, educational seminars for late adopter of the cashless policies should be considered and this should be done at reduced prices or no price to aid participation.

Tools facilitating this policy should be readily available to everyone be it in the rural and non-rural environment. Also, in a bid to make these tools more secure, improved security systems should be installed in the various platforms and facilities involved in e-banking.

6.3 Conclusion

This research, made an attempt in identifying the challenges, hindering the complete adoption of the cashless policy in Nigeria. Using the UTAUT model construct from data obtained within Canaan Land Ota, Ogun state and willing volunteers from the online communities of the researchers (410 respondents), several analyses were carried out. This was to understand the relationship performance expectancy, effort expectancy, social influences, trust and facilitating conditions have with user's behavioural intention to adopt the cashless policy.

The result of the research showed that, the facilitating conditions construct had no direct effect on actual intention to use the system and Trust had no positive effect on user's behavioural intention to adopt the system. However, the performance expectancy, effort

expectancy, social influences, all has positive effects on behavioural intention to use the system which denotes actual intentions to use the system. By system, we mean the use of tools that facilitate the cashless policy implementations.

It is therefore important, to establish and ensure that the factors that have direct influence on the adoption of the cashless policy are addressed. This is enhancing the smooth and rapid adoption of the cashless policy in Nigeria.

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REFERENCES

- [1] Adu, C. (2016). Cashless policy and its effects on the Nigerian economy. *European Journal of Business, Economics and Accountancy*, Vol. 4, No. 2, (ISSN 2056-6018), 81-88
- [2] Ajayi, S.I and Ojo, O.O (2006),” Money and Banking: Analysis and Policy in the Nigerian Context”, Ibadan.
- [3] The Cashless Economy: Why and Where It's Evolving and What Businesses Can Do Now to Prepare.<https://www.forbes.com/sites/forbesfinancecouncil/2017/10/24/the-cashless-economy-why-and-where-its-evolving-and-what-businesses-can-do-now-to-prepare/#719fe2853e11>
- [4]Ayo, C. K., Adewoye, J. O., & Oni, A. A. (2011). Framework for mobile money implementation in Nigeria. *Journal of African Research in Business & Technology*, 2011(1), 1-8.
- [5] Osho, O., &Ugwu, J. N. (2016). “Were We Ready in the First Place ?” : An Analysis of Cashless Policy “WereWeReady in the First Place ?” An Analysis of Cashless Policy Implementation in Nigeria, (December).
- [6] Taiwo, J. N., Ayo, K.O., Afieroho, E.O. and Agwu, M.E (2016). Appraisal of Cashless Policy on the Nigerian Financial System. *West African Journal of Industrial & Academic Research*, Vol16 No1.
- [7] Cashless Policy: Awareness concerns becloud reintroduction of charges. (2017). *Vanguard business paper*. <https://www.vanguardngr.com/2017/04/cashless-policy-awareness-concerns-becloud-reintroduction-charges/> [Accessed: 16-November-2018]
- [8] Central Bank of Nigeria (2012). Toward a cashless Nigeria: Tool and strategies. www.ncs.org.ng/wpcontent/uploads/2012/08/cashless2012-4.pdf
- [9] Odior, S. E. and Banuso, B. F. (2012). “Cashless banking in Nigeria: challenges, benefits and policy implication”, *European Scientific Journal*, Vol.8 (12), retrieved from eujournal.org/index.php/esj/article/view/192
- [10] Osazevbaru, H.O., Sakpaide, E.J. and Ibubune. R.O. (2014). “Cashless Policy and Banks’ Profitability in Nigeria” *European Journal of Accounting, Auditing and Finance Research*, Vol. 2(10): 1-12
- [11] Laoye, J. (2011). “Benefits of cashless economy by experts” retrieved from <http://www.zumalist.com>

- [12] Akhalumeh, P. B. and Ohiokha, F. (2012). "Nigeria's cashless economy: the Imperatives", *International Journal of Management and Business Studies*, Vol. 2(2): 31-36
- [13] Okey, O. O. (2012). "The Central Bank of Nigeria's cashless policy in Nigeria: Benefits and challenges", *Journal of Economics and Sustainable Development*, Vol. 3(14): 128-133.
- [14] Nixon, E. and Okpa, I. (2014). Challenges and benefits of the cash-less policy implementation in the Nigerian economy. *European Journal of Business and Management*, 6(26): 24-32.
- [15] Babalola, R. (2008). E-payment: Towards a cashless economy", a keynote address of the finance minister of state at *card expo Africa conference*. <http://www.nigeriavillagesquare.com>
- [16] Ogbuji, C. N., Onuoha, C. B. and Izogo, E. E. (2012). Analysis of the negative effects of the automated teller machine (atm) as a channel for delivering banking services in Nigeria. *International Journal of Business and Management*, 7(7): 180.
- [17] Moses-Ashike, H. (2011). Cashless Economic can Reduce Risk of Carrying Huge Cash. <http://www.businessdayonline.com/.../22217>
- [18] Akhalumeh, P. B. and Ohiokha, F. (2011). Nigeria's cashless economy; the imperatives. *International Journal of Management & Business Studies*, 2(2): 31-35.
- [19] Akintaro, S. (2012). Going Cashless. IT & Telecom digest, *Online Magazine*, [Accessed: 16-November- 2018].
- [20] Ikechukwu, A. (2017). Cashless Policy in Nigeria : The Mechanics, Benefits and Problems *Innovative Journal of Economics and Financial Studies* Cashless Policy in Nigeria : The Mechanics, Benefits and Problems.
- [21] Okoli, N. H. (2015), "The Cash-Less Policy in Nigeria: Issues, Challenges and Prospects" author-me.com, [Online]. Available: <http://www.author-me.com/nonfiction/cashless.htm>. [Accessed: 17-Nov-2018].
- [22] Omotunde, M., Sunday, T. & John- Dewole, A. T. (2013). "Impart of cashless economy in Nigeria", *Greener Journal of Internet, Information and Communication, Systems* 1(2): 40- 43
- [23] Okechukwu, C., Chigbata, O. M., & Constance, O. (2018). QUESTPaper B06020512 Application of Cashless Policy in Nigeria's Co -Operative Shops : Challenges andProspects.
- [24] Ejoh, N. (2014). The Workability of the Cash-less Policy Implementation in, 5(17), 179-192.
- [25] Yaqub, J. O., Bello, H. T., Adenuga, I. A. and Ogundeji, M. O. (2013). The cashless policy in Nigeria: Prospects and challenges. *International Journal of Humanities and Social Science*, 3(3): 200-212.
- [26] "Traders in Lagos complain of shortage of POS terminals" Premiumtimesng.com (2012) [Online]. Available: https://www.premiumtimesng.com/news/4614-traders_in_lagos_complain_of_shortage_of_pos_terminals.html. [Accessed: 17-Nov-2018].
- [27] "Draft 2017 Annual report" Central Bank of Nigeria (2018) [Online]. Available: https://www.cbn.gov.ng/Out/2018/RSD/CBN%202017%20ANNUAL%20REPORT_WEB.pdf pp 34 [Accessed: 15-Nov-2018].
- [28] Eyisi, A. S., Emengini, S. E., &Chukwubuzo, A. F. (2014). A Critical Analysis of Cashless Banking Policy in Nigeria, 16(5), 30-42.
- [29] Adurayemi, C., & State, O. (2016). Cashless policy and its effects on the nigerian economy, 4(2), 81-88.
- [30] "The world fact book" cia.gov (2018) [Online]. Available: <https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html> [Accessed: 17-Nov-2018].
- [31] Uzonwanne, C., &Ezenekwe, U. (2017). Financial Illiteracy and Cashless System in Nigeria *Financial Illiteracy and Cashless System in Nigeria*
- [32] Williams, M. D., Rana, N., &Dwivedi, Y. K. (2015). The unified theory of acceptance and use of technology (UTAUT): A literature review. *Journal of Enterprise Information Management Article information* : (Vol. 14). <https://doi.org/10.1108/JEIM-09-2014-0088>

- [33] Olabode, O., Fasoranbaku A. and Oluwadare A. (2015). Adoption of eLearning Technology in Nigerian Tertiary Institution of Learning, *British Journal of Applied Science & Technology* 10(2): 1-15, Article no.BJAST.18434 ISSN: 2231-0843
- [34] Hamzat, S., Mabawonku, I. (2018). Influence of Performance Expectancy and Facilitating Conditions on use of Digital Library by Engineering Lecturers in universities in South-west, Nigeria, (February). *Library Philosophy and Practice (e-journal)*. 1620. <https://digitalcommons.unl.edu/libphilprac/1620>
- [35] Sarfaraz, J., Alzubi, M. M. (2015). Unified Theory of Acceptance and Use of Technology (UTAUT) Model – Mobile Banking. *Journal of Internet Banking and Commerce*. <http://www.icommercecentral.com/open-access/unified-theory-of-acceptance-and-use-of-technology-utaut-model-mobile-banking.php?aid=86597>
- [36] Attuquayefio, S., Addo, H. (2014). Review of Studies with Utautas Conceptual Framework, *10(8)*, 249–258.
- [37] Chang, A. (2012). UTAUT AND UTAUT 2 : A REVIEW AND AGENDA FOR FUTURE RESEARCH, *13(9)*, 106–114.
- [38] Alshehri, M. A., Engineering, C., Technology, C., & Group, T. (2012). Using the UTAUT Model to Determine Factors Affecting Acceptance and Use of E-government Services in the Kingdom of Saudi Arabia Mohammed Abdulrahman Alshehri Communication Engineering Submitted in fulfilment of the requirements of the degree of Doctor of Philosophy Dec 2012.
- [39] Vance, A., Elie-Dit-Cosaque, C., and Straub, D. (2008). Examining trust in information technology artifacts: The effects of system quality and culture. *Journal of Management Information Systems*, 24(4), 73-100.
- [40] J. F. Hair, R. E. Anderson, B. J. Babin, and W. C. Black, “Multivariate data analysis: A global perspective (Vol. 7): Pearson Upper Saddle River.” NJ, 2010.
- [41] Oni, A. A., Oni, S., Mbarika, V., & Ayo, C. K. (2017). Empirical study of user acceptance of online political participation: Integrating Civic Voluntarism Model and Theory of Reasoned Action. *Government Information Quarterly*, 34(2), 317-328.
- [42] D. Gefen, “Structural Equation Modeling and Regression : Guidelines for Research Practice,” vol. 4, no. October, 2000.
- [43] Chin, W.W. (1998). The Partial Least Squares Approach to Structural Equation Modeling, *Lawrence Erlbaum Associates*, and Mahwah, NJ.
- [44] Ghalandari, K. (2012). The Effect of Performance Expectancy, Effort Expectancy, Social Influence and Facilitating Conditions on Acceptance of E-Banking Services in Iran : the Moderating Role of Age and Gender, *12(6)*, 801–807. <https://doi.org/10.5829/idosi.mejsr.2012.12.6.2536>
- [45] Technology, C. (2013). The utility of the UTAUT model in explaining mobile learning adoption in higher education in Guyana Troy Devon Thomas, Lenandlar Singh and Kemuel Gaffar, *9(3)*, 71–85.
- [46] Zuiderwijk, A., Janssen, M., & Dwivedi, Y. K. (2016). Acceptance and use predictors of open data technologies : Drawing upon the unified theory of acceptance and use of technology, *32(2015)*, 429–440. <https://doi.org/10.1016/j.giq.2015.09.005>