

Information Asymmetry and Usage of E-Banking Transactions Through Mobile Phones in Commercial Banks

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Abstract

Technological advancement has led to implementation of some innovative products and/or services like electronic banking by rural commercial banks targeting the rural customers who have completely no bank branch available. This study presents an investigation into information asymmetry and usage of e-banking transactions through mobile phones. The study adopted a cross-sectional survey design and used a mixed method approach to collect data from 114 clients. The results obtained revealed that the level of information asymmetry regarding e-banking through mobile phone was relatively low at only 32% of the bank customers in the rural areas having knowledge of e-banking services offered by commercial banks. Similarly, the level of usage of e-banking transactions through mobile phone was low, whereby only 34% of the commercial bank customers in the rural area are using the e-banking services through mobile phones. Albeit, the result further revealed that there exists a positive and statistically significant relationship between information asymmetry and usage of e-banking transactions through mobile phone at 95% confidence level. The study recommends that there should be periodic educational campaigns to address information asymmetry and usage of e-banking through mobile phone by the banks to promote customer patronage through erosion of the fear and negative perception that customers have concerning e-banking services and its use.

Keywords: information asymmetry, e-banking, mobile phones, rural commercial banks

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1. Introduction

Technological advancement has led to implementation of some innovative products and/or services like electronic banking by rural commercial banks targeting the mobile customers and the rural customers who have completely no bank branch available. Using the services and products is fast and it's on 24/7 independent of the location of the customers. In Uganda majority of rural commercial banks have adopted the use of various forms of electronic banking services as a way of providing efficient and effective services to their customers with the aim of reducing the number of customers served at the brick-and-mortar, increase self-service usage, and increase access to financial services by the rural commercial bank customers. However, customers help desk have not yet registered reduced number of customers seeking help on issues related to self-service such as checking balance, payment of utilities among others which is most probably due to the gap in customer knowledge and use of e-banking through mobile phone. In addition, customers complain that reversing a transaction, stopping a payment after discovering a mistake, or a refund may not be possible. With the increase in mobile phone use in Uganda, there has remained lack of knowledge and awareness of e-banking services and/or products among consumers, and, therefore, its usage level among clients need to be investigated, and indeed extant literature indicates that despite such growing interest on self-service banking, no significant studies that have focused on Information Asymmetry, and more so, customer usage of the service through mobile phones (Musiiime *et al* 2011; Donner *et al* 2008; Gronroos 1991). There is a need, therefore, to understand users' knowledge and adoption/usage of electronic banking.

1.1 Usage of e-Banking in Commercial Banking

E-banking generally includes the systems that enable commercial banks customers to access accounts, transact business, or obtain information on financial products and services through a public or private network, including the Internet. Customers access e-banking services using electronic devices, such as a personal computer (PC), personal digital assistant (PDA), Smart phones, or feature phones. Most of the banks are offering information-based services like balance enquiry, stop payment instruction of cheques, transactions enquiry, and location of the nearest ATM/branch etc. Consumers may benefit most from platforms that integrate both m-banking and m-payments features to provide a truly comprehensive financial services solution Boyd and Jacob (2007). However, there had been cases where even a large number of enrollments had failed to translate into actual usage (Dass and Pal, 2011). According to Nsouli and Schaechter (2002), electronic banking makes it easier for customers to compare banks' services and products. The range of products or services that can be accessed through mobile phones include amongst others; Balance inquiries, Mini Statement, transfer funds within the bank, Airtime purchase, bill payments (Centenary Bank, 2015). Chou and Chou (2000) identified five basic services associated with online banking: view account balances and transaction histories; paying bills; transferring funds between accounts; requesting credit card advances; and ordering checks for faster services that can be provide by domestic and foreign bank.

In Western Europe the presence of a common global system for mobile communication (GSM) standard and the high penetration rates of mobile phones have raised the expectations in mobile communication development. While most customers in the United States have their accounts with banks that offer Internet Banking Services, consumers use has remained limited to about 4 percent Schaechter (2002). Mobile devices have become the fastest adopted consumer product to data (Dholakia, Dholakia, Lehrer, and Kshetri ,2003). The use of mobile phones for the implementation of electronic business transactions is additionally boosted by increasingly new technologies, such as wireless application protocol (WAP), Bluetooth, and technological developments are changing daily.

The use of mobile technologies is increasingly widespread especially among African countries such as Kenya, Nigeria, Malaysia and South Africa. In fact, by mid-2014, there were 329 million mobile subscribers in Sub-Saharan Africa, equivalent to a penetration rate of 38%. Consumers are rapidly adopting mobile phones or services not only as basic communication tool but also to access information and a growing range of new applications and services (GSMA, 2014). Various applications can be observed among the users, which ranged from telephone conversation and short messaging services (SMS), to multimedia messaging services (MMS) and internet access, depending on the capability of each mobile phone technology and services rendered. These applications have been made possible through various developments in the mobile telephone technology such as general packet radio services (GPRS), WAP, second generation (2G), third generation (3G), fourth generation (4G) and the fifth generation (5G) standard. The 3G and 4G telephone enables users to access data, voice, and video, as well as internet access through WAP.

In Uganda, e-banking has not received wide adoption among banks' customers (Ndiwalana, 2008; Tabaza, 2006) which makes it hard for banks and other interested parties to design interventions that would enhance the diffusion of internet banking (Kisaame, 2010). In the mobile communications market in Uganda, the five operators are ; - MTN Uganda, Airtel Uganda, Africell, Smile Telecom and Uganda Telecom and they all use GSM technology. Official statistics show that the number of cellular subscriptions in Uganda is over 19.5 billion in the second quarter of 2014 (UCC 2015). Mobile Banking is being deployed using mobile applications are developed on one of the following four channels 1) interactive voice response (IVR); 2) SMS; 3) WAP; and 4) Standalone Mobile Application Clients (SMAC). Mas (2008) and Lyman, Pickens and Porteous (2008) found that there are a large number of different mobile phone devices and it is a big challenge for banks to offer mobile banking solution on any type of device. Some of these devices support java micro edition (J2ME) and others support WAP browser or only SMS; presetting a serious challenge. The use of wireless technology and its integration into a mobile handheld device has led to wide adoptions of e-banking transactions through mobile phones among commercial banks. This can be evidenced in many studies such as (Mubaraka, Uba, and Salome 2013; Maurer 2008; Sathye, 1999; Sohail and Shanmugham, 2004). However, lack of awareness among consumers is affecting the adoption (Sohai and Shanmugham, 2002; Musiime and Ramadhan, 2011) and usage level among consumers needs to be investigated (Donner *et al* 2008; Mishra and Sahoo, 2013).

Uganda's financial system is composed of formal, semiformal and informal institutions. The formal institutions include commercial banks which are authorized to hold checking, savings and time deposit accounts for individuals and institutions in local as well as International currencies. Commercial banks are also authorized to buy and sell foreign exchange, issue letters of credit and offer loans to customers. Formal institutions are less prominent in rural areas than urban areas and they only serve 14% of the rural population. Commercial banks are licensed and

regulated by Bank of Uganda under the Financial Institutions Act 2004 (BoU, 2015). According to Ledgerwood (1999) rural finance is referred to as the provision of appropriate financial services such as deposits, seasonal and short-term loans, money transfers, and warehouse receipts amongst others to the rural population. According to Martha (2012) rural banking is the process of conducting banking transactions out in the country where bank branches are too far away to be of use. Rural banking is popular for very small towns and farmers who live far away from areas of larger population and cannot make the drive/ride to these locations whenever they need to use banking services. Typically, an agent of the bank will visit these rural locations and offer to make transactions in an official capacity. Rural banking is a common practice in places where banking institutions are few and far, and people who need to carry out banking transactions may have difficulty finding a way to do so. With modern technology, more and more people have access to online systems that allow them to conduct certain types of banking services without a nearby branch (Martha, 2012).

1.2 Information Asymmetry

The rise of technology particularly mobile phone, improved the capacity of the individual to access valid and quality of financial information. In the highly competitive retail banking sector, the provision of information to clients on demand is a vital factor in survival and growth. Information Asymmetry is, thus, a situation in which two counterparts have differing quantities or qualities of information. The situation normally favors the more knowledgeable party in a transaction. Usually commercial advertisement increases consumer awareness, as well as "word of mouth" (a comment from someone you know about a product or service). Consumers (buyers) need it so we will not be misled by producers (sellers), it explains if what we buy is worth to our money and not harmful to us and to environment. The producers (sellers) are the ones who are manufacturing products or delivering services. Their responsibility is to educate customers about their product/service. When they are providing services they should carry out it with due skill and care. The adoption of the cell phone has been important in improving efficiency and increasing producer (seller) and consumer (buyers) welfare. Moreover, mobile phones reduce information asymmetry by allowing better access to and use of information, by reducing search costs, and by improving coordination (Akerlof 1970; Mubarak *et al* 2013; Maurer 2008).

In this study, the focus was in understanding the unevenness of knowledge level of the buyers (customers) herein referred to as information asymmetry, while consuming the products and/or services of e-banking, particularly those that have strong linkage with their accounts, and mobile phone use in rural commercial banks.

1.3 Conceptualization of Information Asymmetry and Usage of e-banking

The model shown in the Figure 1, conceptualizes information asymmetry (customer knowledge) in terms of customer safety, security, choice, information, redress, privacy, cost and education. On the other hand, usage of e-banking transactions through mobile phones is conceptualized in terms of usage, product and/or services, technophobia and consumers responsibility.



Figure 1: Conceptual framework on Information Asymmetry and Usage of E-banking

2. Methods

The ensuing sections covered the study site, research approaches and design. The study population and sample design. In addition, It covered study population and sample size, Content validity and reliability, and data measurements, collection and analysis.

2.1 Study Site and Research Design

The study was conducted in Northern Region, focusing on those commercial banks within the region that have implemented e-banking through mobile phone and strong rural coverage through microfinancing business. These were *dfcu* Bank, Post Bank and Centenary Bank. The study employed exploratory cross-sectional survey design in which a mixed method approach was used.

The study population was composed of individual clients of the three rural commercial bank branches operating

in Northern Uganda. The clients were stratified as into the categories of those who had enrolled and those who had not enrolled for e-banking transaction services offered through mobile phones. The respondents were identified through a snowball approach and in close collaboration with these commercial banks branches in order to access them for data collection. Sample selection was based on stratified proportionate sampling technique to ensure representation of the different strata of the population. Overall , 120 respondents were selected from the stratified sample as shown in Table 1. Access to non-registered clients were targeted at10 proportionately except for *dfcu* and Post bank that were newly upgrading their e banking services.

Table 1: Sampling Procedures and techniques

District	Bank	Number of clients		Residence
		Registered	Not Registered	
Gulu	Centenary	20	10	Rural
	DFCU	13	10	Rural
	Post Bank	11	10	Rural
Kitgum	Centenary	14	10	Rural
	DFCU	10	8	Rural
	Post Bank	2	2	Rural
	Total	70	50	

2.3 Content Validity and Reliability

The content the validity was established using a panel of experts from the faculty board. While the Cronbach alpha was established to assess instrument reliability and items that meet the acceptable cutoff point of 0.70 was used in the measuring instrument and the item that does not meet the cutoff point was dropped. The average factor of 0.80 was established and thus the study instruments were deemed acceptable

2.4 Data Measurements, Collection and Analysis

Quantitative Data measurement was based on 5-point Likert scale to obtain perception on Information Asymmetry and usage of e-banking transaction through mobile phones. The questionnaire was self-administered used as a tool for data collection. This was in addition to structured interview guide used to collect views and opinions from key informants in the study field. In data analysis the study applied both descriptive and inferential statistics.

3. Results and Discussions

The section presents the results and discussions under use of e-banking transaction through mobile phone, the level of information asymmetry and the relationship between information asymmetry and use of e-banking transactions.

3.1 Use of E-banking Transactions through Mobile Phone

The level of e-banking transaction through mobile phones were descriptively examined in terms of Usage, Services, Technophobia and Consumer Responsibility as shown in Table 2.

Table 2: Use of e-banking transactions through mobile phones

N = 114		Frequency	Percentage	Mode	SD
Usage	Strongly Disagree	7	6%	2	1.143
	Disagree	44	39%		
	Not Sure	23	20%		
	Agree	28	25%		
	Strongly Agree	12	11%		
Services	Strongly Disagree	4	4%	4	1.012
	Disagree	27	24%		
	Not Sure	36	32%		
	Agree	37	32%		
	Strongly Agree	10	9%		
Technophobia	Strongly Disagree	4	4%	2	0.994
	Disagree	50	44%		
	Not Sure	31	27%		
	Agree	22	19%		
	Strongly Agree	7	6%		
Consumers Resp	Strongly Disagree	7	6%	4	1.104
	Disagree	28	25%		
	Not Sure	26	23%		
	Agree	42	37%		
	Strongly Agree	11	10%		
Average	Disagree	49	43%	2	1.042
	Not Sure	26	23%		
	Agree	39	34%		

With respect to construct Usage, 40% agreed that they frequently use e-banking transactions through mobile phone and the mode is 2, implying that the usage is relatively low. Otherwise, 51% disagreed, hence the majority rarely use e banking. This was in line with a study by Magutu et al (2011) which observed that the usage of e-banking has remained relatively low, as not many customers are using the innovation. Similarly, e-banking was introduced in commercial banks in Uganda as early as 1997, however, adoption by customers stood at only at 39% (Magaji, 2020).

In term of array of Services in use, a moderate number of respondents, at 41% agreed that they have used the array of e-banking Services offered by their banks and the mode is 4, which means higher number of respondents are in agreement and this signifies a moderate product and/or service use. This was in sequence with a study by Suri and Jack (2016) which concludes that new products and/or services may induce usage. Even so a worrying percentage of 60% of which 28% are in disagreement and 32% were not sure gives a shaky ground for the penetration of e banking.

In terms of technology use (Technophobia), 29% agreed that without fear, they use technological appliances related to e-banking transactions through mobile phones and the mode is 2, signifying that relatively low customers use technology related to e-banking transactions through mobile phones. The result was in order with a study by Thatcher and Perrew (2002) that the little use may be due to technological complexity. According to Samreen and Mariam (2015) Technophobia was found to moderate the relationship of perceived credibility and customer acceptance. The results suggest that customer's having a positive perceived credibility may hesitate

in accepting online banking, if they have a fear of using technology or computer.

In accordance with Consumer Responsibility, 53% agreed that they have a responsibility and/or obligation when using e-banking transaction through mobile phone and the mode is 4, pointing to the fact that on the average a good number of customer are aware of their responsibility and/or obligations when using e-banking transactions through mobile phones. This was in line with a study by Wilson et al (2009). Thus, on the average, 75% of the clients of which (49% disagreed while 26% are not sure of) with the uptake of e banking in terms of usage, services, technophobia and consumer responsibility. This leaves 39% of the clients who are in agreement of what e banking as a package entails.

3.2 The level of Information Asymmetry

The levels of Information Asymmetry were examined in terms of customers' knowledge about e-banking transactions through mobile phones in terms of knowledge about Safety, Security, Choice, Information, Redress, Privacy, Cost, and Education. This is shown on Table 3(a) and 3(b).

In terms of safety, 39% agreed that they have knowledge about safety of e-banking transactions through mobile phone and the mode is 4, implying that relatively low numbers of customers are knowledgeable about the safety of e-banking transactions through mobile phones. This was in line with a study by Zanoon *et al* (2013) which concludes that the higher the level of customer knowledge, the increased degree of safety.

".....people are aware that it is safe and also now days with the current inconveniency associated with the use of ATM, you feel like you can risk and eventually end up using the e-banking service.....Like sometimes when you visit ATM, you may not be able to withdraw money especially towards the end of a month, for example, you may be interested in it" respect to consumer knowledge about security of e-banking transactions through mobile phones, 31% agreed that they have knowledge about security of e-banking transactions through mobile phone and the mode is 3, signifying that a relatively low numbers of customer have knowledge about e-banking security. This was consistent with a study by Zanoon *et al* (2013) and Friedman (2002) which discovered that respondents are unable to tell whether e-banking transactions connection (web security) is secured or not.

Some customers believe that the e-banking services through phone is not only secured but it also enhances and simplify work while performing cash transactions and this was clear in the text below:

".....the security of cente mobile is ok.....in such a way that whenever you want to use cash you do not have to carry it on the hand but on your mobile phone, for example, whenever you want to purchase stock from Kampala so that you open up a grocery shop in Pader town, then you just withdraw the money from bank to mobile money account and to purchase the stock you sent the money from your mobile account to the traders mobile money account, hence no worry of cash being stolen which is very safe...with anybody tempering with your cash"

In terms of consumer knowledge about choice of a e-banking transaction through mobile phone to use, 30% agreed that they have knowledge about the e-banking to choose for use when using e-banking transaction through mobile phones and the mode is 3, which dictates that a relatively low number of customers are knowledgeable about e-banking to choose for use.

Table 3(a) : Information Asymmetry (Customers Knowledge)

N = 114	Likert Stem	Frequency	Percentage	Mode	SD
Safety	Strongly Disagree	13	11%	4	1.113
	Disagree	23	20%		
	Not Sure	34	30%		
	Agree	37	33%		
	Strongly Agree	7	6%		
Security	Strongly Disagree	5	4%	3	0.857
	Disagree	25	22%		
	Not Sure	49	43%		
	Agree	34	30%		
	Strongly Agree	1	1%		
Privacy	Strongly Disagree	2	2%	3	0.945
	Disagree	22	19%		
	Not Sure	43	38%		
	Agree	36	31%		
	Strongly Agree	11	10%		
Choice	Strongly Disagree	3	3%	3	0.818
	Disagree	24	21%		
	Not Sure	53	46%		
	Agree	32	28%		
	Strongly Agree	2	2%		

The customers' choice awareness issue is also most noticeable in the following quotation from another bank customers:

".....I do think that customers have choice to make, people have choice but to me if I can rate then it will be fifty-fifty meaning a moderate product/service choice for the customers"

".....to me customers have choices, especially when I want to transfer funds, withdraw cash, deposit cash, pay bills, buy airtime among others.....check my balance, in fact I have a lot of options while using the e-banking services.....without available options, I would just ignore and use the systems"

This was in sequence with Shapiro *et al* (1999) and Tversky *et al* (1981) which concludes that sometimes customers are forced to buy things that he/she may not wish to buy for lack of option to choose from.

Considering consumer knowledge about information related to e-banking transaction through mobile phones, 41% agreed that their bank provide them with information on e-banking and the mode is 3, that implies that a moderately low number of customers are not sure of the kind of information that their bank provide.

Qualitative findings discovered that customers are aware that their bank do provide some form of information in the use of e-banking transactions through phones and this was clear in the quote below:

".....They provide information inform of brochure and.....they rely on systems prompts and therefore if you know how to use a phone then you are able to get more information..... even on the Internet you can get that information, they also run advert on the radio and TV, but there are so many sources of those information.....and also sent short text messages (SMS) to customers"

This was in order with a study by Santiago (2001) which concludes that information about prices, costs and fees could be hidden from the consumer, creating profitable information asymmetry.

In responses to the consumer knowledge about where to go for Redress on the use of e-banking transactions through mobile phones, 31% agreed that they have knowledge of where to go for redress incase a lost occurs when using e-banking and mode is 3, which means that a relatively low numbers of consumer are unaware of redress when using e-banking. This was consistent with studies such as Muwanga (2011), Surjadjaja *et al* (2003), and Bejou *et al* (1998) which puts out lack of legal framework in the use of e-banking.

Interview finding suggest that customers are aware of where to go in case a problem occurs while using e-banking through mobile phone and this was strong in the quote below:

“.....all banking services are regulated by the bank of Uganda, so as a customer if you have any compliant, you are free to send the complaint to BoU or you seek redress from the court of Law.....also me personally I had a personal experience while I was using cente mobile, they bank deducted my money worth UGX 150,000 but when I send a complaint at the bank branch they told me that was a transaction charge and a kept wondering to myself, which transaction fee can reach up to 150,000?.....”

In terms of customer knowledge about privacy of e-banking transactions through mobile phones, 41% agreed that they have knowledge about privacy of e-banking and the mode is 3, this show that a relatively low numbers of customer are not sure of their privacy when using e-banking transactions through mobile phones.

Interview finding discovered that customers are aware that e-banking transaction through phone have some level of privacy and this was made clear by this quote:

“.....it is private.....well private because you always use password, unless someone have a chance to view your password.....it is well private.....because even in the bank, they rely don't have access to your password.e-banking through phone to me is very private”

On the other hand, some customers are doubtful if e-banking through mobile have some level of privacy in it and this was strongly emphasized in the two quotes below:

Quote1: “.....according to my opinion, I don't think if the privacy of this e-banking systems through phone is 100 percent private”

Quote2: “.....to me it is not private.....because the systems are operated by human beings and I believe those officials who operate the computer can easily see information about me.....so for me I believe the system is not private”

This was consistent with study by Nsouli *et al* (2002) and Warren and Brandeis (1890).

In view of customers knowledge about transaction cost of e-banking through mobile phones, 38% agreed that they have knowledge about transactions cost of e-banking and the mode is 3, which implies that a relatively low numbers of customers are unaware about the transactions cost of e-banking through mobile phones.

Another customer view was pointing to the fact that customers are rely not aware to the cost or charges for e-banking while using it and is emphasized in the quote below:

“.....if I am to rate the level of awareness in terms of cost of e-banking product/service, then it would be zero percent, people are not aware completely.....because even me who have been using the service for over a year, I am not aware of the cost or charges on every transaction carried out”

This was in line with a study by Laukkanen (2007), Kolachi (2006) and Sanders (2004) which stressed the need for low transactions costs to the customers

To look at customer knowledge about education and/ or training on e-banking transactions through mobile phones, 16% agreed that they have knowledge that their banks provide education and/or training on the use of e-banking transactions through mobile phones and the mode is 3, signifying that a relatively low numbers of customer are unaware of any education and/or training on e-banking.

Table 3(b) : Information Asymmetry (Customers Knowledge)

N = 114	Frequency	Percentage	Mode	SD	
Cost	Strongly Disagree	3	3%	3	0.844
	Disagree	22	19%		
	Not Sure	46	40%		
	Agree	41	36%		
	Strongly Agree	2	2%		
Education	Strongly Disagree	5	4%	3	0.766
	Disagree	24	21%		
	Not Sure	67	59%		
	Agree	16	14%		
	Strongly Agree	2	2%		
Information	Strongly Disagree	4	4%	3	0.957
	Disagree	22	19%		
	Not Sure	41	36%		
	Agree	39	34%		
	Strongly Agree	8	7%		
Redress	Strongly Disagree	11	10%	3	1.037
	Disagree	27	24%		
	Not Sure	40	35%		
	Agree	31	27%		
	Strongly Agree	5	4%		

Qualitative finding revealed that customers are aware that their bank provide education and/or training on the use of e-banking through mobile phone. This was clear in the quote below:

“.....yes, there are mostly no specific customer training sessions design to provide awareness about the product.....but always when you know how to use a phone, then you can be able to use the mobile banking services through phone because the systems keeps prompting you of the next available step and it's just a matter of knowing how to use a phone, if you don't know how to use a phone then there is no way in how you will use the service.....the service use is based on the assumptions that all customers knows how to use a phone”

This was in row with a study by Maurer (2008), Schaechter (2002) and Mulira (1991) that concludes the need for consumer educations and/or training in the use of any new and innovative products of commercial banks so as to encourage product use in a changing environment.

Therefore, in view of the level of information asymmetry (customer knowledge) of e-banking transactions through mobile phones, 32% agreed that they have knowledge about e-banking transactions through mobile phone and the mode is 3, suggesting that the level of information asymmetry is relatively low among customers using e-banking transactions through mobile phones. However, it should be noted that even if less percentage agreed, the greater percent are not sure of their knowledge about e-banking and this has been signified by the mode of three. Hence we conclude that the level of information asymmetry is relatively low (32%) among customers.

3.3 Information Asymmetry and Use of E-banking Transactions

In order to establish the causal relationship between information asymmetry and use of e-banking transactions through mobile phones identified in the previous subsection, a regression analysis confirmed that information

asymmetry accounts for only 33% in use of e-banking transactions through mobile phones.

Table 3: Regressions Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta	B	Std. Error
(Constant)	.469	.425		1.105	.272
Safety	-.062	.096	-.066	-.644	.521
Security	.168	.143	.138	1.168	.245
Privacy	-.148	.109	-.134	-1.362	.176
Choice	-.041	.124	-.032	-.331	.741
Cost	.284	.126	.230	2.252	.026
Education	.175	.145	.129	1.208	.230
Information	.205	.116	.188	1.769	.080
Redress	.226	.104	.225	2.168	.032

Safety, privacy and choice are negatively related to provision of e-banking and are not significant predictor of e banking services. The negative prediction associated with safety in this study follows from the low level of perceptions shown by clients about e banking earlier observed at 36%. Similarly , with regards to privacy, some customers are doubtful if e-banking is private. This follows the effort by the banks to caution clients that ;-

”expressly advises the Customer that the Bank does not have control over the computer, computer software systems and other incidentals used by the Customer to access their website and further that transmission over the Internet cannot be guaranteed, warranted or represented to be absolutely secure”

While security, cost, education, information and redress are positively related. Even so, only education and redress are significant the significant at 95% confidence level. With regard to education, the study is in line with Ramón, Jiménez and Díaz (2019 who established that the higher the educational level, the more likely consumers will use it.

4. Conclusions

From the above results, we conclude that the level of information asymmetry (customer knowledge) of e-banking transactions through mobile phones is relatively low among rural commercial bank customers. Similarly, the usage level of e-banking transaction through mobile phones is relatively low among the rural commercial bank’s customers.

The level of information asymmetry (customer knowledge) of e-banking transactions and the usage level of e-banking transaction through mobile phones are both low at 32% and 34% respectively among the rural commercial banks’ customers.

Using multiple regression analysis, the findings were that information asymmetry accounts for only 33% to the use of e-banking transactions through mobile phones. Thus, amongst the commercial banks there are other factors affecting the usage level of e-banking transactions.

The level of information asymmetry (customer knowledge) of e-banking transactions and the usage level of e-banking transaction through mobile phones are both low at 32% and 34% respectively among the rural commercial banks’ customers.

Information asymmetry (customer knowledge) and usage of e-banking transaction through mobile phones are positively related. The relationship is significant at 99% confidence level with Pearson correlation coefficient of $p = 0.449$. Thus, few of the educated and knowledgeable clients are the one partaking e banking services.

Using multiple regression analysis, the findings were that information asymmetry accounts for only 33% to the use of e-banking transactions through mobile phones at $p = 0.00$ levels of significance (95% confidence level). Thus, amongst the commercial banks there are other factors affecting the usage level of e-banking transactions.

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