Mobile Money Users' Challenges. Evidence From Developing Countries [1,2,]

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Abstract

Financial exclusion poses a challenge to financial development and poverty reduction in developing countries. Mobile payments platforms have been identified as a solution in these localities. However, despite the promising potential benefits, users of mobile money services face usage challenges. This paper sought to investigate the difficulties currently encountered by users of EcoCash, a mobile payments platform in rural Zimbabwe. A total of 250 questionnaires were distributed through 5 mobile payments registered outlets at Nemanwa Growth Point in Masvingo Rural District. Results reveal operational challenges such the lack of local dialects on the application, inhibitive costs, intermittent service interruptions and relatively low levels of ICT literacy due to lack of proper usage training by the service provider. Results reveal that in order to accelerate financial inclusion in developing countries, relevant stakeholders to undertake ICT literacy campaigns, review transaction costs and incorporate local dialects on the mobile money platforms.

Key words: Mobile Money/Payments, Challenges, Zimbabwe.

1.0 Introduction

FinScope Consumer Survey Zimbabwe (2014) defines the financially excluded as people who do not have or use any financial products and/or services; neither formal nor informal. Presently, there are various forms of financial exclusion. Kempson and Whyley (1999a; 1999b) identified access exclusion; condition exclusion; price exclusion; marketing exclusion; self-exclusion. Together, these facets of financial exclusion constitute a complex set of barriers to accessing and using mainstream financial services for many people with limited incomes. Most financial service providers choose not to focus on the low income communities because of their modest financial needs, and the resultant small to non-existent profit margins (Burchardt and Hills, 1998a). In Zimbabwe, this observation holds true given that 65% of the adult population resides in the rural areas and are dependent on subsistence farming; 25% rely on remittances from relatives and children abroad and in urban areas, only 18% receive a regular salary, 80% of the adult population earn less than USD $200 per month; with unemployment levels in excess of 80% (FinScope, 2014).

Digital inclusion is transforming financial transacting in developing countries over the last decade. This technology wave has facilitated mobile money; a new branchless, convenient and real-time financial services platform delivered to all through a mobile telephone handset. The terms mobile money and mobile payments refer collectively to a set of applications that enable people to use their mobile telephones to manipulate their bank accounts, store value in an account linked to their handsets, transfer funds or even access credit or insurance products (Donner and Tellez, 2008).

In recent years, developing countries have experienced a surge in mobile telephone penetration rates. In contrast, there is sparse availability of basic financial services especially in the same localities. The Mobile Network Operators (MNOs) have identified this "gap" in financial services' access by the vulnerable poor, women and youths. The MNOs have enabled immediate and convenient provision of basic services such as savings, insurance and micro-credit to the financially excluded through a mobile telephone device.

In Zimbabwe, the Postal and Telecommunications Regulatory Authority of Zimbabwe (POTRAZ, 2014) reported a mobile telephone penetration rate of 87.3%, impressive in comparison to a national "banked" adults figure of 24% (FinScope, 2014). The value of transfers and transaction over mobile payments platforms since inception totalled USD $445.7 million in December 2014 (POTRAZ, 2014). This is evidence of the immense potential of mobile banking to harness funds which currently are circulating in the informal market.

1.1 Problem Statement

Mobile money platforms were introduced Zimbabwean MNOs in late 2011. To date, these innovative financial services have ushered in an opportunity for low income unbanked Zimbabweans to access rudimentary financial services. Presently, the MNOs have an edge over traditional banking services as they have managed to overcome the geographical and cost constraints posed by the traditional "brick and mortar" model. Plausible as this may be, the mobile money innovation is also fraught with usage challenges. Studies on the same have been conducted in developing countries such as Kenya, (Ngugi, Pelowski and Ogembo, 2010) India, (Chopra and Wright, 2012; Kumbhar 2010; Misra and Wickamsainghe, 2004). However, no similar study has been undertaken in Zimbabwe to date. Local MNOs have hardly paid attention to the intricacies faced by users; which have the potential to stall the adoption rate and use of the services.

1.2 Research Purpose

This paper employed a case study of EcoCash to follow up on mobile money usage by the unbanked in rural Zimbabwe, focusing solely on the difficulties currently encountered by users. The purpose of this paper was to examine the challenges that registered users of the mobile money platforms met following their decision to adopt the services. It sought to provide service providers and regulators with possible solutions to drive financial inclusion efforts in Zimbabwe. If unmatched with immediate redress, these present challenges that can derail the potential benefits of financial inclusion which is so desperately required by Zimbabwe. This paper adopts the terms mobile money/payments as synonymous.

2.0 Literature Review

Agarwal (2010); The Consultative Group to Assist the Poor (CGAP, 2013); and Azad (2012) observe that mobile banking is indeed a powerful way to deliver financial services to the unbanked population in the rural areas as service providers can leverage on technology for financial inclusion of the financially excluded that have a mobile telephone handset, but no bank account. Mobile money has numerous inherent merits over traditional banking methods; it breaks down geographical constraints, offers real time immediacy, security and efficiency (Murendo, *et al.*, 2015; Munyegera and Matsumoto, 2014; Rugara, 2013; Moloi, 2009).

Despite the remarkable benefits stemming from the adoption of mobile banking technologies for financially excluded rural communities the world over, usage of the same has inherent challenges. Chopra and Wright (2012) argue that users of mobile payment systems are intimidated by mobile money technology complexity especially where they have a direct interface with, for example, a mobile handset. When compared to swiping a card or signing a form, using mobile phones for financial transactions is still considered tedious for users.

A study by Ngugi, Pelowski and Ogembo (2010) in Kenya on the current challenges faced by M-PESA users revealed that repeated system malfunctions, security and fraud, poor network reception, frequent power outages, slow service at peak times, too few agents or no agents at all to handle challenges in some places, relatively few hours of service from agents. There were also several security and fraud related challenges.

In India, Misra and Wickamsainghe, (2004) report that there exists lack of knowledge and trust in mobile banking, and consequently, service providers do not enjoy the confidence of villagers. This in turn, impedes the speed of realising financial inclusion in the country. In addition, there is lack of facilities like 'stop payment' as service providers are unable to cancel an erroneous transaction. Moreover, the general literacy rate in rural India is poor as very few people can write and understand English or Hindi language.

Network connectivity is also cited as a major obstacle in rural India, together with security and privacy concerns. There are suggestions that many Indians are still not convinced of the benefit of using mobile telephones for financial transactions. Kumbhar (2010) discovers that financially excluded Indian rural communities also face poor refund service, constant breakdown of mobile banking which creates inconvenience for customers, high charges, and absence of authentication procedures.

3. Methodology

A cross-sectional survey was adopted for this particular research. EcoCash, a mobile money platform of Econet Wireless Zimbabwe was the identified case under study. This particular method was the most succinct to allow the observation of mobile money challenges experienced by current users. A cross-sectional survey method provided a quick quantitative description of attitudes, experience and opinions of the sample population (Creswell, 2003).

The population of the study included all adult users of EcoCash mobile banking platform in Zimbabwe. The sampling frame consisted of 250 adult users of EcoCash at Nemanwa Growth

Point, in Masvingo. The 250 respondents were selected using a combination of probability and non-probability sampling procedures. Cluster sampling was used in selecting 5 EcoCash agent service points at Nemanwa Growth Point. Each of the 5 service points was treated as a mutually exclusive stratum. Thereafter, the convenience sampling technique was used in selecting 50 respondents at each of the 5 identified service points.

A structured questionnaire comprising of 26 closed-ended and open-ended questions was distributed to the 250 respondents. The questionnaire sought the respondents' informed consent prior to taking part in the survey. Nominal, Ordinal and Interval scales were used to measure outcomes for the closed-ended questions. The questionnaire was piloted for clarity, contextual relevance, comprehensiveness, sequencing on 12 peers who are familiar with banking and finance areas. Blue tests were also undertaken on 30 randomly adult users of EcoCash at Nemanwa Growth Point before the actual field work. Feedback was incorporated accordingly, before the questionnaires were finally used on the 250 respondents.

Reliability and validity of the survey items were tested. To assess reliability, which indicates the degree of agreement between the multiple items making up a construct, we determined the Cronbach's Alpha for our variables. The average Cronbach's Alpha for all constructs was 0.78, higher than the recommended threshold of 0.70. Out of the 250 questionnaires that were sent out, 237 were completed and returned. The completed questionnaires were checked for plausibility, integrity and completeness resulting in 235 usable cases, recording a response rate of 94%. Analysis of responses through descriptive and statistical analyses was carried out through the use of the SPSS Version 16 software.

4.0 Study Results

The results of the study are discussed in detail below.

4.1 Demographic Profile of Respondents

Table 1 below shows the demographic profile of the survey's 250 respondents.

Table 1: Respondents' demographic profile

		Female	Male
Age	18-24 Years	7.0%	2%
	25-35 Years	23%	21%
	36-45 Years	26%	8%
	Above 45 Years	6%	7%
Highest Qualification	Primary School	3%	4%
	Secondary School	53%	31%
	High School	1%	0%
	Tertiary Level	4%	4%
Source of Livelihood	Formally Employed	6%	3%
	Farmer	41%	15%
	Self Employed	14%	21%
	Not Employed at the moment	0%	0%

Monthly Earnings	<USD $50	21%	9%
	USD $50-$100	25%	23%
	USD $101- $150	6%	4%
	over USD $150	8%	4%

Source: SPSS 16.0 Output

Table 1 above indicates that gender-wise, females constitute the greatest proportion (68%) of the rural population in Zimbabwe. In addition, the country has a very high general literacy rate, with the majority of respondents having completed secondary school education. Seventy eight percent of the rural population reported being subsistence farmers who earn a monthly income of up to USD $100.

4.2 Active Bank Account Ownership and Frequency of Use

Table 2 below illustrates the number of respondents owning bank accounts, and av erage number of times they use the same.

Table 2: Ownership and frequency of bank account usage

		Do you have an active bank account?		
		Yes	**No**	**Total**
How often do you use your bank account?	Fortnightly	30	0	30
	Once a month	48	0	18
	Once in 2 months	3	0	3
	Not Applicable	0	154	154
Total		**81**	**154**	**235**

Source: SPSS 16.0 Output

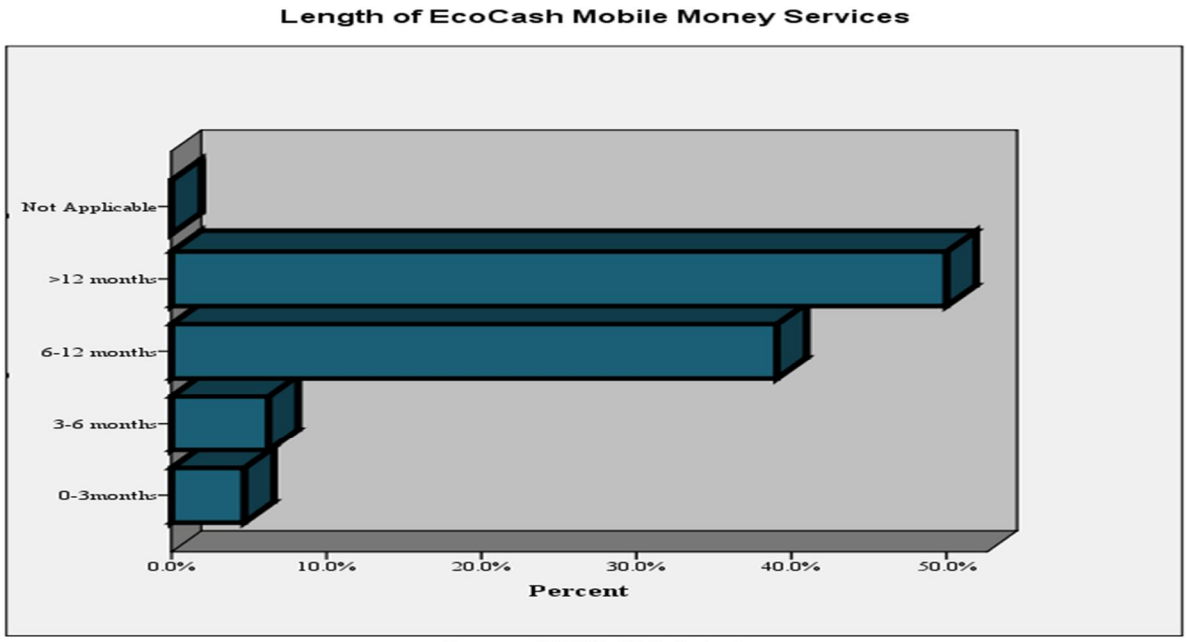
Sixty-six percent the respondents reported as being currently unbanked. Explanations cited for not having bank accounts included low incomes, lack of trust in the banking institutions, inability to provide banks with required documentation such as proof of residence, employment and salary advice slip since the majority of people in the rural areas are subsistence farmers. In addition, respondents reported that the initial deposit, service and account maintenance fees levied by banks were beyond their reach. Other respondents pointed out that having a bank account was unnecessary as one needed to travel in excess of 30 kilometres from their homestead around Nemanwa Growth Point to Masvingo city in order to transact. The few who had bank accounts reported using them for receipt of salaries and retirement pension pay-outs.

4.3 Mobile Handset Ownership and Usage of EcoCash Service

All the respondents reported owning a mobile telephone handset, and having registered for usage of EcoCash, the mobile money service from Econet Wireless Zimbabwe, a mobile network operator. When asked on the length of use of the mobile money service, respondents cited different tenures

ranging from a few weeks to in excess of a year (see Figure 1 below), suggesting the increasing popularity of EcoCash.

Figure 1: Length of use of EcoCash



Source: SPSS 16.0 Output

4.4 Training and Subsequent Use of EcoCash

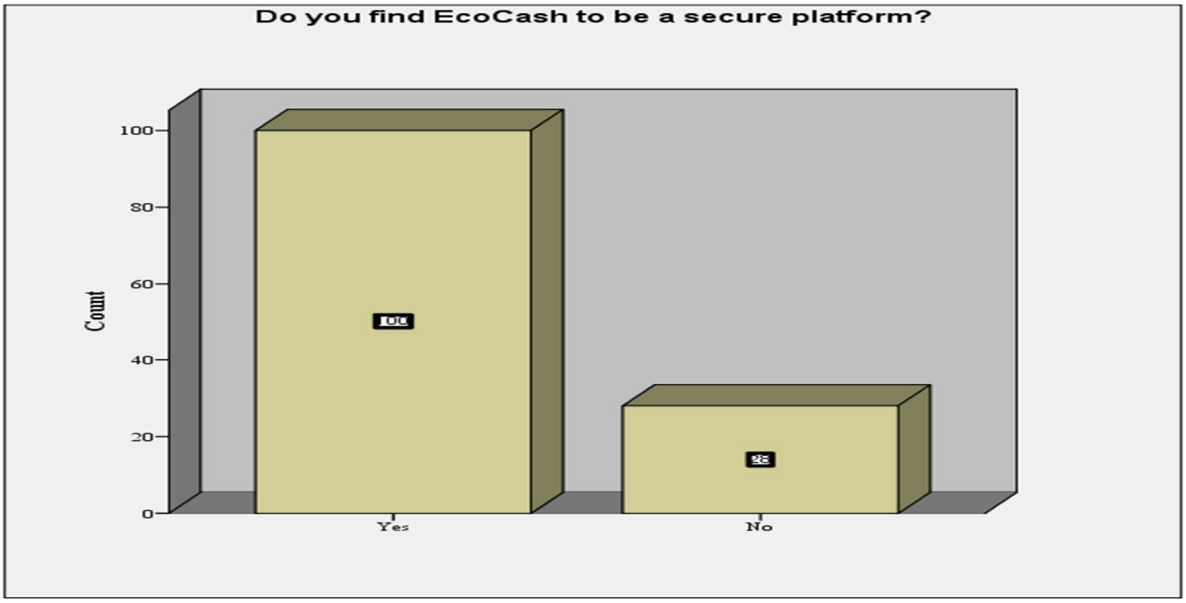
The majority of respondents had received training on the use of EcoCash mobile money services prior to transacting on their own. Such training was provided by the MNO, Econet Wireless Zimbabwe through agents located at Nemanwa Growth Point. A total of 178 respondents (76%) indicated that they had been taught how to use the EcoCash services by an agent when they registered to use the service. The remainder of respondents reported having to rely on family and friends to teach them how to transact.

The subsequent degree of difficulty in using EcoCash was measured using a Likert scale whose answers ranged from "Not difficult at all" to "Quite difficult". The results show even after training some people still experienced various challenges. A total of 67% of the respondents reported having difficulties in using EcoCash. The majority of these explained that they found it quite tedious to conduct transactions such as cashing in or out, paying a merchant, or just checking their account balances, and as such they often required the help of family members, friends or the EcoCash agents. This, they revealed, was a bit embarrassing. Thirty-three percent found it very easy to use the mobile money service, stating that the transacting instructions were very easy to follow. This revelation indicates the need for constant customer education on how to EcoCash services as currently mobile money is the sole financial access solution for the rural population.

4.5 Perceived security of mobile money services

The respondents' perceived security when using EcoCash mobile money services is shown in Figure 2 below.

Figure 2: Perceived security when using EcoCash



Source: SPSS 16 Output

With regards to perceived security of EcoCash, 78.1% of the respondents expressed a profound sense of security in the application which prompted one activate a private access pin before access, such that even if they lost their mobile telephone handsets to theft, the funds would be secure. All that was needed was to replace the Subscriber Identity Module (SIM) card for the handset, activate a Personal Identification Number (PIN), and seamlessly resume transacting. The major reason cited by those who were felt insecure included the inevitable disclosure of the access PIN when seeking help from family members, friends and EcoCash agents. As a result, they felt that the same could in their absence have access to their mobile wallets and cash-out funds without their knowledge.

4.5 Costs

The respondents were also probed on the current costs levied on the EcoCash platform, as well as whether they would continue using EcoCash services if these costs were increased. All the 128 respondents indicated that Econet Wireless Zimbabwe, the MNO providing EcoCash service posed a network challenge due to congestion on its system. Consequently, these users frequently encountered error messages when transacting, and this was frustrating as it delayed important transactions often a time.

4.6 EcoCash and Local Dialects

All the respondents expressed that the mobile payments platform was not availed to them in their local dialects, such as Shona and Ndebele. This is a profound weakness as many people would relate more to a service that is offered in their local dialect.

4.7 Refunds on EcoCash

Another variable investigated in the survey was the ability to get a refund after error in transacting using EcoCash. Respondents cited that currently EcoCash did not have an option to effect a reversal for a wrong transaction straight from the application, such that one had to be extremely careful before confirming a cash-out or payment to a merchant from their account. Upon an error, one had to call the congested Econet Wireless Zimbabwe help desk. And it would take up to 72 hours for reversals to be effected. Respondents also revealed that they lived far away from the EcoCash agent outlets; distances in excess of 5 kilometres and therefore, they spent time and money travelling to Nemanwa Growth Point from the surrounding villages when they needed to cash-out from their wallets, or were in need of groceries from the shopping centre which they paid for through EcoCash.

4.8 Cash availability at EcoCash outlets

Liquidity was often times difficult to access at the mobile money agent outlets. Only 6 respondents cited that cash was always readily available when they required a cash-out from their accounts. The remaining 229 respondents revealed that when withdrawing even small amounts of up to USD25 would require them to wait up to 4 days as the agents did not have cash floats of large amounts. Often times, shop owner take advantage of the situation by asking people to buy some groceries so as to cash-out. Furthermore, respondents would often times resort to spending more time and financial resources by travelling 25 kilometres more to the city, in Masvingo in order to cash out large amounts from their accounts. All this was found to be inconvenient.

4.9 Time-out

Another challenge identified by the respondents was that the EcoCash system had a timing- out feature; that is one had to be really fast when using the application. After about 90 seconds it would give an error feedback message, and one would have to restart the transaction. The EcoCash agent outlets were also found to close quite early such that it was impossible for one to cash out at night when an emergency arose. Another challenge noted was to do with power outages. Electricity cuts were found to interrupt the EcoCash network, and as a result at time service on the platform was unavailable.

5. Discussion

The purpose of the article was to investigate the difficulties encountered by users of EcoCash mobile money services in Masvingo rural district. Results thereof generally indicate a high literacy rate, in Zimbabwean rural areas as evidenced by the fact that the 84.4% of the respondents had attained Secondary School education. Furthermore, it was discovered that there are more females compared to males resident in the rural areas, since men work and live in the urban areas.

All the respondents were owners of mobile cellular phone handsets and registered users of EcoCash mobile banking facility, thus reflecting a dense mobile telephone penetration through to the rural peripheries, and impressive mobile banking adoption rate by the rural populace since the launch of the facility by Econet Wireless Zimbabwe in the country in late 2011. Only 34.4% of the respondents cited ownership of active bank accounts, yet all respondents owned mobile telephone handsets thereby revealing that indeed the rural masses are still being ignored by the banks, leaving them financially excluded from the formal banking system as traditional banks do not deliver services tailored to fit the unbanked population, which has led to a gap in the market. This gap in the market is one that MNOs, especially Econet Wireless Zimbabwe can take advantage of and go into overdrive in terms of further promoting its mobile payments brand; EcoCash in rural communities where the unbanked poor live to advance adoption of the platform.

The paper or article showed that a combined 89% of the respondents had used EcoCash mobile banking facilities for some considerable time; between 6 months through to in excess of a year, hence, this article confirms that Econet Wireless has gained some ground in serving the excluded rural communities in Zimbabwe. Therefore, the system is currently fraught with inconveniences. In light of fierce competition from other MNOs such as Telecash, a mobile banking facility from Telecel, One Wallet, an innovation by NetOne; more work still needs to be done by Econet Wireless Zimbabwe in order to encourage increased usage of EcoCash.

Findings from this study showed that there is a positive relationship between being taught to use the EcoCash facility upon registration and subsequent ease of use of the same by individuals on their own. Consequently, MNOs should intensify training of newly registered users, and encourage EcoCash agents to readily avail themselves to help customers. However, power outages continue to be a perennial challenge in Zimbabwe.

The majority of respondents were worried about security when using EcoCash. As a result the onus is on the mobile payments service provider to ease the insecurity of the users through wide spread marketing of the safety offered by EcoCash. The mobile banking service provider should also review its current prices which respondents said were quite high. Currently, competitors such as TeleCash and One Wallet are cutting into the same market, which can result in customers shifting service provider preferences.

Although all the respondents were found to be literate, they expressed their disappointment in the absence of EcoCash in their local dialects. Zimbabwe has sixteen (16) official languages, with English, Shona and Ndebele being the widely spoken. The research findings suggest that these be availed on the EcoCash platform in order for the service provider to tap into the vast financially excluded market. In addition, a voice-interactive feature which would enable users to evade the current difficulties such as application times-out.
Econet Wireless should also address current inconveniences associated with cash unavailability at EcoCash agent outlets through the use of point of sale machines, as well as incentivising more retailers to be agents in the rural peripheries.

6. Conclusion

Mobile money leverages on the high mobile penetration in the rural communities. This paper provided an extensive outlay of the challenges currently faced by users of the EcoCash, hoping to advance such knowledge to MNOs offering mobile banking services in order to help them improve in their quality of service delivery. The paper concludes that EcoCash is not user friendly especially to the poor who have a limited level of education as some respondents highlighted that they experienced challenges in using EcoCash on their own and have to enlist the help of family members to transact. The use of local language will also aid in reducing the challenges that EcoCash users are experiencing because most of the users are not financially literate and do not understand some of the prompts asked by the application.

This paper also concludes that network congestion poses a serious challenge to users as they sometimes encounter error messages whilst effecting transactions. The study also reveals that stopping a wrong transaction is another problem faced by EcoCash users. It typically takes up to 72 hours to reverse a wrong transaction. In some cases, money is irrecoverable if the wrong beneficiary withdraws the funds transferred erroneously.

Cash availability at EcoCash outlets is another challenge experienced by users in trying to use the product. EcoCash agents were found not to always have cash readily available and in some cases limit the amount one can withdraw. This causes users to effect multiple transactions and in the process lose out due to transaction charges.

7. Recommendations.

The paper recommends that MNOs provide a full and reliable network coverage so that system errors are minimised. The study also recommends that including local dialects in mobile money applications can help to reduce the language barriers that the less educated experience when using the application. Though strides have been made in registering many agents, the study recommends that MNOs only engage agents who show the ability to always have cash so as to reduce incidents of agents not meeting the cash demands of customers.

8. Limitations and Future Studies

There were several limitations in this study. Firstly, the empirical evidence of this study is collected within the Masvingo Rural District, which is a portion of the 10 provinces in Zimbabwe, and as such, results thereof may not be generalized and applicable to other districts, the entire country, as well as other nations. Further research could pay attention to increasing the sample size within Zimbabwe and incorporating other developing countries for comparison of research results. Secondly, this was a cross-sectional survey, where responses to the variable studied were collected at the same point in time. Therefore, individuals' perceptions over challenges encountered in using EcoCash may change overtime due to increased usage experience and improvements in the application itself. As a result, it is recommended to conduct a longitudinal (panel data) research design to investigate the mobile banking challenges encountered at multiple points of time during the usage process.

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