An Exploratory Study of Financial Inclusion of Rural Communities through Digital Financial Services: Case Study of Mpungu Constituency, Kavango West Region, Namibia

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Abstract

In recent times it has become a common observable known fact that the usage of digital financial services is trying to achieve comparative advantage through diversification, and growth in market share to increase the profit. Through digital financial services, the process of transferring money has become more convenient, quick and reliable. Regardless of scholars and policy makers agreement on its potential to offer financial accessibility and inclusion, it seems to offer more increased accessibility to financial services, especially for persons in rural areas where there seem to be few financial services institutions physical buildings. Considering that very scanty literature on financial inclusion by digital finance services in rural areas (including the Mpungu Constituency in the Kavango West Region of Namibia) exist, there is the need for further studies in this area. This study therefore explored the effect of digital financial services on financial inclusion in rural communities in Namibia using the Mpungu constituency of Kavango west region as a case study. Applying a quantitative research method, questionnaires were self-administered to collect data from 155 persons. The research found that many people in rural communities

possess mobile devices, perform digital financial services such as withdrawals on weekly basis. Challenges that rural communities face in using digital financial transactions include network and mobile devices. From the above, the research concluded that, through digital financial services, financial inclusion is enabled in rural communities. Generalizing the study conclusion to all rural communities could be challenging as data was collected only from the Mpungu Constituency in the Kavango West Region in Namibia.

Keywords: Digital Financial, Financial Inclusion, Digital Financial Services, Rural Communities, Digital Financial Platforms.

1. INTRODUCTION

Rural communities are highly underserved in financial services [1] and this could be as a result of formal financial institutions failure to establish development banks in rural communities. This has led to the development of informal or semi-formal financial institutions in rural communities as alternative financial services providers. Interest rates of the informal financial providers are very high and as a result, inhabitants of rural communities find it difficult to access necessities such as agriculture inputs, access veterinary services, contract labour for planting, harvesting, and goods transportation and invest in education, shelter, health and/ or handle emergencies [2]

The above seems to be a major challenge in developing countries as about 70% of adults in the developing countries has no access to financial services. For example, rural Madagascar has one bank branch for 1.4 million people even though they can have stable incomes from a variety of farm and non-farm activities such as trading, food production, livestock rearing, day labour or seasonal employment on farms or in the city. Access to financial services that serve productive needs that is investing in enterprises, building assets and protective purposes can provide further stability [3] as cited by [4].

Digital financial services offer a means to reduce numerous financial difficulties and henceforth a contributor to national economic development through financial inclusion [5]. The earlier work of [6] also pointed to this same fact as the work indicated that digital funds linked to administrations leads to financial inclusion, especially amongst populations that lacked it before.

Since 2010, the World Bank has led the initiative for improved financial inclusion in developing countries to help ease poverty levels in developing and emerging economies [7]. Recently, the significance of digital finance seem to attract the attention of policy makers and scholars, because of the number of issues that it appears to address and amongst these seem include its ability to increase financial inclusion, decrease charges of financial intermediation for banks and Fintech providers, and increase aggregate expenditure for governments [8] and hence benefit national economy in the long run.

In the absence of formal financial institutions in rural areas and the high interest rates of informal or semi-formal financial institutions in rural areas, make digital financial platforms, ideal for rural communities. According to [9] and [10], digital financial platforms give rural communities the opportunity to connect with providers of savings, credit, and insurance products. Considering the unavailable formal financial institutions in rural communities, the high interest rates of informal or semi-formal financial institutions in rural communities and the possibility of financial inclusion that digital financial platforms enable, this research explored rural communities' financial inclusion through digital financial services in the Namibian context.

Though a few studies [28] [29] [30] on financial inclusion in the Namibian context exist, they seem not to have focused on rural communities and were more general. Considering this and also that the most recent of the said studies was conducted four years ago, the need to conduct further

studies on financial inclusion through digital divide in the Namibian context became more imperative.

2. LITERATURE REVIEW

In this research, digital financial services is defined as a financial service that involves an agency banking, cell phone banking and internet banking which aims to improve physical access to and use of services, especially amongst the unfortunate rural households. The developing innovative financial inclusion models via digital financial services particularly in rural communities in Namibia are helpful in removing the gap of financial instruments in the country [11]. According to [12] digital banking is a branchless banking approach whereby banking services are offered to consumers through technologies like mobile phones, payment cards, post offices or small retailers. While to the [13], it is the means transferring monetary claim between a payer and a beneficiary. In terms of buying and selling, digital banking usually occur online between a buyer and a seller and that payment are usually made through digital financial tools such as encrypted credit card numbers, electronic cheque or digital cash with the backing of a financial intermediary.

Rural households most often face the challenge of financial inclusion. [14] pointed out that, other than borrowing money, rural people are often comfortable with travelling distances to save little amount of money into an account, specifically the small-scale business persons who are busy with their businesses and do not get time to travel distances for financial services. Hypothetically, the theory of financial innovations proposes that the application of digital financial innovations, improves financial services whereas the technology acceptance models assume that acceptance of digital financial services enhances accessibility of financial services by numerous users. This is confirmed in [15] Work. In their work.[15] applied a panel household data and Logit to research digital money, payments, and rural household welfare in Uganda, [15] found that, the adoption of mobile money rises per capita consumption by 72% and also that the use of mobile money usually end in users making frequent remittances compared to non-users.

Furthermore, [16] study in Nakuru district of Kenya used, that employed a descriptive research design on the effects of mobile money transactions on financial performance of small and medium scale enterprises, found that mobile money transactions have a significant effect on sales revenue. The study of [17] on the effects of mobile money on the performance of banking institutions in Kakamega town in Kenya showed that mobile services contributes positively to the financial performance of financial institution.

Considering the possibilities of digital finances and inclusion, financial have often worked at closing the financial access gap in a lot of countries by capitalizing on digital financial services to reach to the categories of people and communities that seem excluded from financial services, especially in areas where the financial Institutions don't have branches [18]. This is confirmed by an earlier [19] report that indicated an increased fast paced digital money adoption, mostly in east Africa, partly because of the high rates of mobile phone network diffusion and adoption and that digital money seem to be only available affordable alternatives amongst rural communities [20] [21] [22]. The east Africa case above is a confirmation of the internet being an enabler of digital financial services as indicated by [23], [24] [25] and its recognition in the banking industry which the traditional banks have taken advantage of.

Digital money platforms are better known to aid financial access between the unfortunate and transform livelihoods, due to the relatively lower services costs and minimized distance between households and services points [26]. Considering the purpose and benefits of digital financial services to rural communities and also the practical benefits in east Africa as discussed above and that Namibian rural communities could also benefit from digital financial services and hence get financial inclusiveness, this research explored the rural communities' financial inclusion through digital financial services. The researcher used the Mpungu Constituency in the Kavango West Region in Namibia as a case study.

The studies of [28] seem to point out rural communities' use of monetary administrations such as banks, funds and credit co-agents, microfinance establishments, digital monetary administrations suppliers or casual gatherings in Namibia have shown that they have made. To unearth further evidence of this, this study will collect further evidence from a rural community in Namibia towards this. A comparative study of the Namibia financial sector by the [29] study for 2011 and 2017, found some positive changes in the levels of financial inclusion expansions. The study found that, while financial inclusion for 2017 increased by 78.0%, for 2011, it increased by 69%: hence an increment of 9% in 6 years. [29] study seem to have been a general study and hence not rural focused: thus requiring further studies on rural communities as they seem to be more affected by financial exclusion issues. This is confirmed by [30] study that that concluded that Namibia has a higher exclusive finance and lower access to banks in rural areas. Considering that, [30] study was conducted four years ago, further studies on the current status quo of financial inclusion in rural areas in Namibia will add to literature and hence this study.

3. RESEARCH METHODOLOGY

The study employed a quantitative method as it enabled the researchers to collect further data on existing variables as in the study literature. Applying the Slovin sample deterministic formula with an error margin of 8% on the 20700 population of the Mpungu constituency in the Kavango Region [27], a sample size of 155 was arrived at. The researchers applied a slovin sample deterministic formula so as to get a sample that was representative of the study population. Seemingly, the researchers choose an error margin of 8% so that a 95% confidence level could be achieved and by that, the researchers were hopeful that, should the study be repeated several times, the findings would reflect the same results 95% of the time. Based on the variables generated from the reviewed literature, questionnaires were developed and distributed randomly amongst the community members. The first part of the questionnaire notified the community members of informed consent and that they could choose to stop responding to the online questionnaire or/and not submit at all. It was made clear that, opting out of the survey along the way had no consequences. The second part of questionnaire focused on collecting data on bio and mobile/digital money. The last part of the questionnaire collected data on digital financial practices, saving and payment system. Of the 155 distributed questionnaires, 115 completed questionnaires were returned and hence resulting in a high acceptable response rate of 74.2%, as response rates usually above 50% are considered acceptable. To ensure validity and reliability of the study questionnaire, four experts reviewed it and made inputs into the initial questionnaire and after modifications; it was submitted to the Research Ethics Committee of the International University of Management (IUM), Namibia for consideration and approval. The distribution of the questionnaire was only done after its approval.

4. DATA ANALYSIS

This section presents the research findings based on the analysed data. The findings are presented in sections as, financial transactions through digital channels, Device period of use and the financial information challenges.

Table 1 shows the social and demographic information of the respondents. While 36% of the respondents were aged 31 to 40 years (highest responding age group), 59% were males,80% were married, 59% unemployed and 73% educated. The educated class are those who easily accept change and hence likely to influence digital financial services use. The high percentage of married persons also indicates the possibility of digital financial services as couples or families of couples may want to use the said services to carry out transactions amongst themselves.

TABLE 1: Socio- demographic information of respondents

Variable	Males	Females	Total
Sex	91(59%)	64(41%)	37(100%)
Age(years)			
18-30	9(6%)	5(3%)	14(9%)
31-40	34(22%)	22(14%)	56(36%)
41-50	29(19%)	17(11%)	46(30%)
51+	19(12%)	20(13%)	39(25%)
Marital Status			
Never Married	6(4%)	5(3%)	11(7%)
Married	73(47%)	51(33%)	124(80%)
Divorced	12(8%)	8(5%)	20(13%)
Employment Status			
Employed	36(23%)	28(18%)	64(41%)
Unemployed	57(37%)	34(22%)	91(59%)
Educational Level			
Educated	70(45%)	43(28%)	113 (73%)
Uneducated	22(14%)	20(13%)	42 (27%)

Figure 1, shows that, while 73% of the respondents were educated, 27% were uneducated. The higher number of educated participants is an indication of their ability to read and type on mobile devices and hence their ability to undertake financial transactions through digital mediums. As indicated on figure, while 41% of the respondents were employed, 59% were unemployed. This is an indication that about 40% of the participants have bank accounts and hence have access to or / and use digital financial services for transactions. Furthermore, while 85% of the respondents possessed mobile devices, 15% did not have mobile devices. Of the 85% that had mobile devices, 38% of the respondents had used it for 3 to 4 years, 28% used it for 1 to 2 years, 12% used it for 4 to 5 years and 9% used it for over 5 years: thus majority of the participants 87% of the participants with mobile devices for a minimum of 1 year. This is an indication that, rural community members have mobile devices to enable them undertake financial services and that they also have the experience of using mobile devices and hence have the capability of undertaking digital financial services.

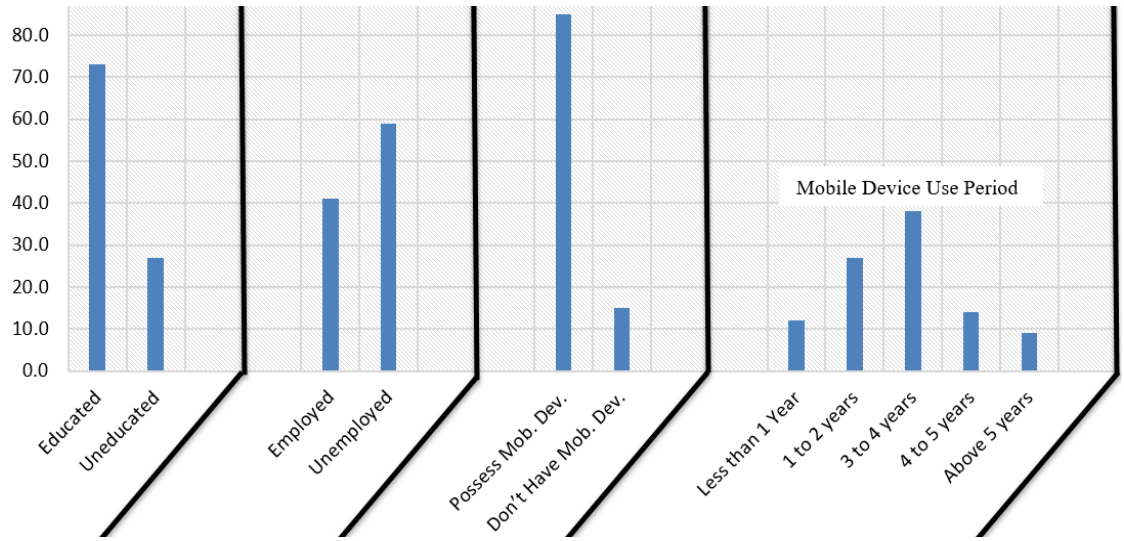

FIGURE 1: Education, Employment, Mobile Device Access and Mobile Device Period of Use.

On the type of digital financial services that participants could use mobile devices for, as demonstrated in the next figure, majority of the participants indicated that they could use it as an equivalent bank account, savings bank account, digital money account, and digital savings and for withdrawals. This therefore indicates rural communities use of digital financial services in the absence of formal financial institutions in rural communities and hence making rural communities financial inclusive.

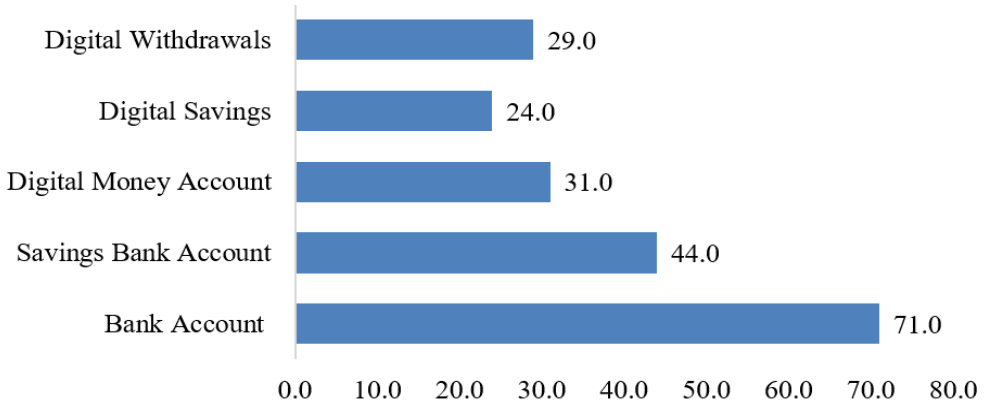

FIGURE 2: Financial Information.

When asked, if they have used their mobile devices for any of the said digital financial services above, the majority of the participants (80%) indicated that, yes, they used it as such. On frequency of use of their mobile devices for digital financial services, the majority of the participants, 47% and 37% indicated that they use it on a weekly and monthly basis, respectively. The reasons for using the digital financial services majority indicated that, it is because of the ease of use and the rest followed that, it is because of its reliability, cost effectiveness and fastness. This is an indication that, rural community members are able to enjoy the financial services that their community members enjoy in urban areas as they are able to undertake financial services with ease, effectively and secured.

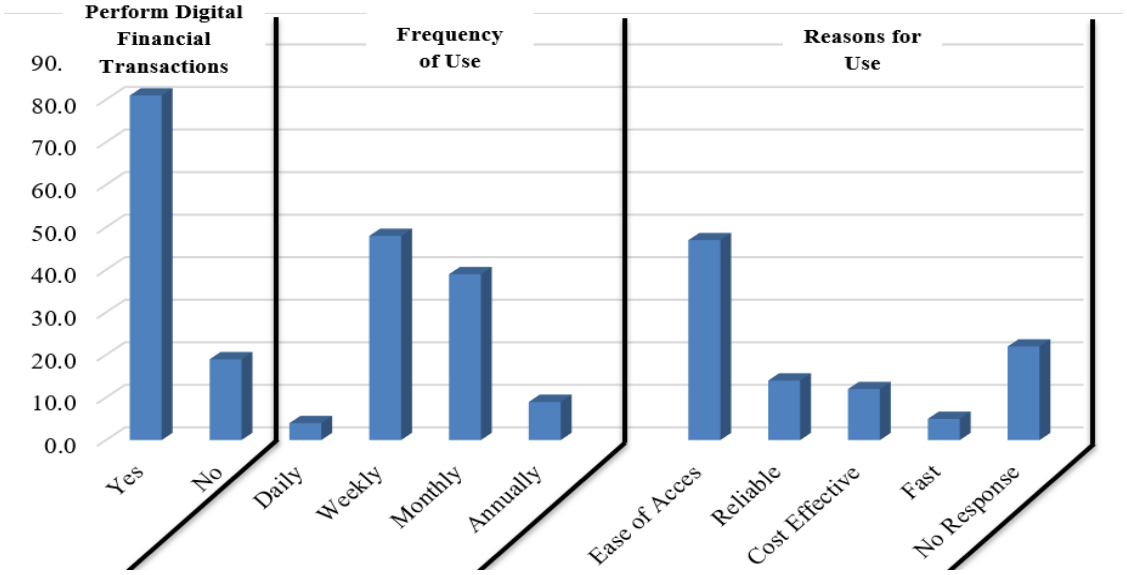

FIGURE 3: Financial Transaction, Frequency of Use and Why.

On challenges they face in using digital financial services, majority of the respondents indicated network challenges, lack of interest in their digital accounts, mobile device challenges and transaction cost challenges.

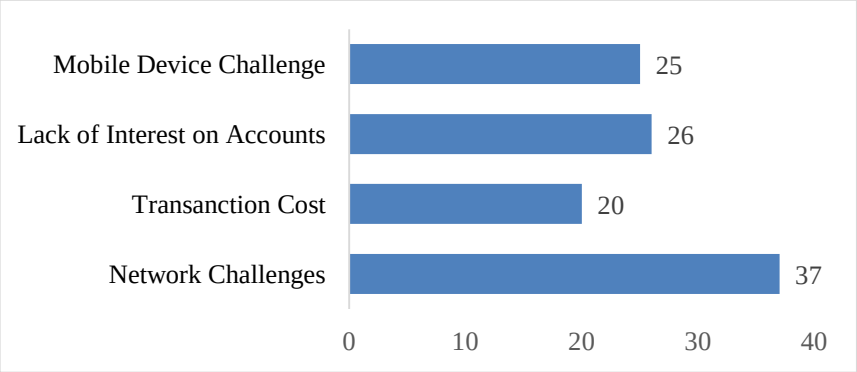

FIGURE 4: Digital Financial Transaction Challenges.

5. CONCLUSIONS AND RECOMMENDATIONS

Considering the unavailable or limited formal financial institutions in rural communities, their associated high interest rates and the possibility of financial inclusion in rural communities through digital financial platforms, this research explored rural communities' financial inclusion through digital financial services. The research confirmed [31] findings as it found that many people in rural communities possess mobile devices and have the mobile devices for more than one year: thus possibly being able to participate in digital financial services. Furthermore the research found that rural community members use digital financial platforms for transactions, most often on a weekly basis: thus confirming the finding of [32] that there digital inclusion or / banking services in rural communities is possible through the use of mobile devices. Amongst banking services that rural communities currently carry out through mobile devices include savings, withdrawals and digital financial transactions.

Challenges that rural communities face in using digital financial transactions include network issues and mobile device challenges. This confirms the findings in an earlier study by [33]. From the above findings, the research concludes that, through digital financial services, financial inclusion is enabled in rural communities, hence confirming the findings of [34]. Generalizing the study conclusion to all rural communities could be challenging as data was collected from only rural constituencies in Namibia. Similar study in future should consider collecting qualitative data from more rural communities to get further detailed insight on financial inclusion through digital financial services.

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