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Digital Financial Payment systems and Financial Inclusion: A study on Youth in the Rwenzori Region, Western Uganda

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Abstract

Purpose: Digital payment systems constitute an important dimension in regard to building an inclusive financial system in an economy. However, in spite of its significance, literature has offered little evidence on the extent to which digital payment systems contribute to financial inclusion. This study investigates the contribution of digital payment systems on financial inclusion among the youth in Rwenzori region.

Originality: Youth involuntary financial exclusion, and the imperative for government and financial service providers to attend to youth financial needs, was examined in relation to digital financial systems in a developing country setting.

Materials and Methods: A convergent parallel mixed-methods approach in line with assumptions of the critical realism philosophy was adopted in this study. Data from 186 youth council members for the quantitative design and 11 CEOs of selected Banks and MFIs were analyzed by regression.

Findings: Results indicate a positive relationship between digital payment systems and financial inclusion among the youth in Rwenzori region.

Unique Contribution to Theory, Practice and Policy: This study contributes to financial inclusion literature; Showcasing the relevance of digital payment systems on youth participation in the monetary economy, Reminds the government to revise existing financial frameworks to consider youth in the national financial planning since this has riffle effects on business growth, revenue collection capacity and GDP of Uganda and, Commercial banks and other financial institutions appreciate the need to have youth-focused programs not only for economic benefit but for social entrepreneurship reasons.

Keywords: *Financial Inclusion, Digital Finance, Financial Services, Youth, Rwenzori Region*

JEL Codes: L26, L53, L86, B26, G28, H42

INTRODUCTION

Financial inclusion is impliedly one of the key development concerns embedded in the 2015-2030 United Nations, Agenda for Sustainable Development. These policy documents emphasize development of inclusive financial system for all economies (Sarma & Pais, 2011) if inclusive growth and development is to be attained. Financial inclusion is envisaged as a key policy area, for; it has the potential to contribute to poverty reduction, economic and social development and financial stability (Amidzic, Massara & Mialou 2014). One of the studies (refer to Yap et al., 2023), basing on observed finance-related SDG index, testify the effect that financial inclusion programs have on achievement of finance-related Sustainable Development Goals (SDGs). They confirm that financial inclusion positively correlates with achievement of the 2nd, 5th and 8th SDGs. Their findings are quite significant in influencing policy making to increase interventions aimed at raising the extent of financial inclusion in countries that strive to enhance directly or indirectly the realization of finance-related SDGs. Other scholars like Churchill and Marisetty, (2020) using multiple measures of poverty like household Poverty Probability Index (PPI), household deprivation scores, and poverty line testify that financial inclusion has a strong and none debatable poverty-reducing effect. With reference to key multidimensional indicators of financial inclusion, we extrapolate the importance of financial inclusion especially for African countries whose inclusion statistics are alarming.

In fact, this study drawing from literature envisages that as the world strives to redefine the post-2015 development framework for sustainable development goals (SDGs), one of the key international policy issues for nations and national governments is financial inclusion considered to bring the financially excluded into the money economy. Same necessity was hinted on by expert group meeting (EGM) November 2022 at UNCTAD in Geneva, which re-echoed on the riffle effects, access to finance by small and medium-sized enterprises, micro-enterprises and individuals, particularly youth, could have. The discussion here is geared towards measures to improve access to financial services and related efforts to reduction of their transaction costs to individuals and firms. More so a related call was made by the Inter-Agency Network for Youth Development under United Nations' coordination as reported by UN Capital Development Fund (UNCDF, 2012).

Apparently several interventions have been made at global level and the 1st solution as an intervention to youth financial inclusion was made by UN Capital Development Fund (UNCDF) especially with the 2010 launching of a partnership with The MasterCard Foundation to provide a youth start capital of $12.2 million. Even though it aimed at increasing access to both financial and non-financial services for low-income youths, it still remains an area of need considering poverty and unemployment levels in developing countries. Also the 2012 Amsterdam sessions that UN organized were among others goal-oriented endeavors that had impact where 364 participants from 83 countries including 70 youth participants from 40 countries met and the overriding reason was to ideate on how best countries can be enabled to bring a change to their youth financial behavior to permit desirable social economic transformation. Another youth financial inclusion attempt was done by UNICEF especially when it partnered with Aflatoun, a Netherlands-based non-government organization that aimed at promoting curricula that facilitated youth learning largely in areas of not only social responsibility but also in the areas of financial competency for individual youths. All these efforts were made owing to reflection on a number of empirical studies testifying that increasing financial services has many economic benefits for the youths (Barnard et al.,2020). It's unfortunate to report however that many governments in developing countries, banks and other service providers have not tapped from the unique and

significant contribution the youths have for economies including big market share and revenue. Holistic approach is envisaged as the only medium for achieving sustainable development for all, considering the broad development aspirations as enshrined in the Africa agenda 2063, East Africa Community (EAC) Vision 2050 and Uganda Vision 2040.

Financial inclusion apparently is a pervasive concept which has evolved over time, and apparently appears to be a development challenge for many countries including Uganda (Yap et al., 2023). This study borrows definitional insights of financial inclusion from Al-Smadi, (2023) and World Bank, (2014) to refer to it as '*an economic state where individuals and firms are not denied access to basic financial services based on motivations other than efficiency criteria'*. A deep scrutiny of this definition present interpretation and meaning paradox necessitating inclusion of financial exclusion since the concept of financial inclusion in some way connote on financial exclusion. In this case a fair definition would echo two categories of financial exclusion i.e voluntary and involuntary exclusion. Guided by Al-Smadi, (2023) and World Bank, (2014), we see the necessity to distinguish between three financial inclusion concepts: (i) access to financial services; (ii) availability of financial services; and (iii) the actual use of financial services. Impliedly we observe that the first measurement aspect of financial inclusion is access/outreach to financial services and the second one is the availability of financial services and third one is usage.

Previous studies on outreach or access dimension of financial inclusion have made reference to automated teller machines (ATMs) (Senou et al.,2019), while others have reflected on the issue of number of bank branches (Al-Smadi, 2023). Apparently all these scholars converge or agree on having many branches and the ATM intensity in an area to influence the extent of households and enterprises access to financial services. These demographic and geographic aspects of financial inclusion/exclusion mean that generally financial inclusion measurement would refer to specific density indicators, i.e bank branches and or ATMs. We are bothered in this study to see whether youths in Rwenzori region have inability challenges to physically access financial services or other factors are at prey! Are deposit-taking functions (bank branches) within the reach of most youth in the region? This question draws from the assumption that availability of ATMs which are computerized telecommunications devices increase the possibility for clients to access financial services conveniently in public places. Many other related questions abound! Is it the question of cost involved in opening bank accounts that limit youths from having bank accounts? Whereas the usage dimension of financial inclusion relates to number of individual borrowers or households or even enterprises that have obtained loans from banks, it's not clear how youths in Rwenzori region access and use financial products. Here we interested ourselves in knowing whether the youths in the region have deposit accounts or loan accounts. Or if they don't have why? Altogether these issues guided in interrogating the access and usage dimensions of financial inclusion.

It becomes a matter of concern to us also because statistically from the World Bank's Global Financial Inclusion Index, individual exclusion from the financial systems stands at 2.5 billion globally, where 20% of this population due to distance factors to a point of financial services, account for failure to have account in the bank (Demirguc-Kunt & Klapper, 2012). This means therefore that more policy efforts are needed to increase accessibility to financial services perhaps by having many physical financial services access points. According to National Planning Authority (NPA) Uganda has the second youngest population in the world, 50.3 percent of the 40 million people are below 15 years (NDPIII, 2020/21-2024/25; youths are the majority constituting 78% (UBOS Report June,2024), which when linked to SDG 1 realization calls for radical approaches to poverty reduction, by invoking proactive resilience

enhancement measures that attend to social protection needs of people (in this case the youth) and promote equitable access to basic services and other resources that permit decent life living.

The unfortunate part of the story is that existing government financial frameworks provide benefits in socio-economic programs only to the tune of 10% inclusion e.g in the Parish Development Model. It apparently shows low level of government commitment on youths' financial inclusion. Moreover, the Youth Livelihood Programme (YLP) provided marginal funding support of UGX. 265 Billion to cover not the whole country but only 112 districts for the first 5 years of implementation 2013-14 to 2017-18. Relatedly Ministry of Gender, Labour and Social Development (MGLSD) report, (2021) indicate that out of 148,845 targeted youths, only 83,000 benefited which is 44% leaving out 65,824 which means less than a half benefited. All that notwithstanding, the election of youth members of parliament (MPs) who are picked from regions each covering over 18 districts have not helped much especially when it gets hard for them to effectively represent the youth issues (Gasparri & Munoz, 2019). Considering the vital role youths play in the socio-economic development, challenges in accessing formal financial services, usage of financial products, financial education and consumer protection would minimize their contribution as key players in socio-economic life of the country.

This study uniquely observes that there is under funding of youths programs and considering the fact that they are the majority in the country as shown above, it leaves a gap of high dependency and serving as a source of theft in communities due to high unemployment. This altogether seem to jeopardize the good intensions of the Ugandan government as portrayed in the various development policy documents on fighting poverty especially among specific targeted beneficiaries i.e unemployed and poor youths aged between 18-30 years who among others continue to drop-out of schools and failing to attain high education for knowledge acquisition to participate fully in the economy. This literary means that the majority of the youths are not empowered to engage in productive work. Much is needed to turn youth population into advantage. Whereas National Development Plan (NDP) III and now NDP IV 2025/2026-2029/2030 aspire to *"increase average household incomes and improve the quality of life of Ugandans"* the road is still narrow considering the above statistical information on youth support. The study anticipates greater pay-off in terms of increased government revenue if standard of living for the youths improves. Considering the Uganda Revenue Authority (URA)'s current level of revenue collections i.e. 26 trillion (60%) according to 2023/2024 budget frame work, there are many benefits government can tap on if national youths are included in money economy. The bigger picture of the positive impact scale from increase in demand (market share for service providers), increase in the level of economic activity i.e. banking and other transactions which bring taxes that would raise the country's domestic tax base which itself has the potential to reduce reliance on external borrowing largely accused of coming with high interests and a lot of strings attached that affects our country's independence (decision making power).

Whereas solution to this problem can be sought from many fronts, some scholars have identified digital financial payment systems to help close the gap of the unbanked population and bring them fully into the monetary economy (Peterson, 2018). Digital financial payments have emerged as a transformative force in the financial landscape, offering the potential to enhance financial inclusion and influence financial behavior, particularly among critical community members such as health workers (Ketterer, 2017), gender entrepreneurship (Kumari, Giri & Saruparia, 2025), youths (Poudel et al.,2023). Of course the proliferation of mobile money (GSMA, 2016) has ushered in significant opportunities for the expansion of

Digital Financial Services. These developments have far-reaching implications for both financial inclusion and financial behavior within various segments of the population. Mobile money has emerged as a highly efficient means for conducting a wide array of financial transactions, encompassing fund transfers, service payments, access to microcredit (IMF 2019b), and micro insurance. The convergence of mobile money and traditional banking services (IMF 2019b) is reshaping the landscape of financial transactions in Uganda. Digital financial payment systems encompass a diverse range of financial services that are accessed and delivered through digital channels, including payments, credit, savings, electronic transfers, remittances, and insurance. Financial service channels, such as bank branches, ATMs, bank agent outlets, and mobile money agent outlets, serve as catalysts for the adoption and utilization of financial services, ultimately enhancing financial inclusion and shaping financial behavior. However, the potential of digital financial payment systems in these realms remains largely theoretical unless rigorously examined in critical sectors, particularly among youth in hard-to-reach areas in in Rwenzori region, Uganda. This study comprehensively measures the relationship between the facets of digital financial payment syetems (mobile money wallets, branchless banking and electronic wallets), and financial inclusion of youths Rwenzori region utilizing relevant sub-variables in the data collection tools outlined in the methodology section.

LITERATURE REVIEW

Digital Financial Payment Systems and Financial Inclusion

Why are we concerned with inclusive financial system in an economy? Sarma & Pais, (2011) justify it on account of not only economic efficiency but also on welfare standpoint. These scholars argue that inclusive financial system enable large segments of the population to gain financial capability in adoption of secure and safe saving behavior which is key in terms of facilitating usage of various financial products and services. It is implied therefore that availability of financial services outreach points is an incentive to luring and enabling rural poor individual household members or even small entrepreneurs or small enterprises to be part of the formal credit market if they have collateral. A reference can be made to the possible financial exclusion caused by any existent financial market imperfections (for example high transaction costs, information asymmetry, or even lack of adequate legal infrastructure). It's not clear here whether youths in Rwenzori region have collateral challenges! But whatever the case may be national level policy frameworks can be enacted to minimize the negative effects of such financial market imperfections on the youths. Otherwise if such credit constraints are not addressed the youths will always fear high-risk investments which has a negative implication on resource allocation decisions of the youths broadly hampering not only poverty alleviation but also aggregate economic growth (Beck, Demirguc-Kunt, & Martinez Peria, 2007). There are other angles of viewing the benefit of financial inclusion in an economy including financial stability (Mehrotra & Yetman, 2015). This financial inclusion perspective largely reflects on the total sum or aggregate of the possibility of bank assets diversifying especially when the overall risk profile of banks reduces adding a big stability element to the financial system. Previous studies into the banking sector outreach/access dimension as a measure of financial inclusion have shown a positive correlation between different banking sector outreach measures with financial inclusion in terms of access and usage of financial products and services (Shen et al., 2020).

Everywhere the benefits ushered in by the fourth Industrial Revolution (Industry 4.0) are mentioned especially in revolutionalising social and economic systems. There are many observed transformations in the financial sector where quite a number of technological

infrastructures have eased the data processing and its service delivery implying great effects of decision-making quality and speed (Bilan, Rubanov, Vasylieva, & Lyeonov, 2019). Considering the direct effect of these industry 4.0 changes in the financial service space especially for individuals, enterprises, government and the economy, creators of financial products and services must and have to embrace them. The impact areas of these digital financial infrastructure include: enabling delivery of a wide range of financial services especially to the hitherto financially excluded groups (Demirguc-Kunt et al., 2018); as individuals and enterprises access credit facilities it boosts the growth of the gross domestic product of a country (Manyika et al., 2016); besides, as financial institutions turn to digital services, transactional costs reduce, meaning their performance improve (Scott, Van Reenen, & Zachariadis, 2017). In consideration of benefits that an individual participation in a financial system has including; increased ability to start businesses, ability to survive financial crises and to be able to control risk, World Bank and other international bodies have unceasingly encouraged policy makers globally to incorporate financial inclusion plans and strategies, since financial inclusion has multiplier effect on poverty reduction and sustainable economic growth (Demirguc-Kunt et al., 2015). Moreover, this thinking aligns well with the public good theory of financial inclusion- every member of the population has a right to access and use financial services (Ozili, 2020b). Here we see finance as a force for good meaning that national governments have a natural mandate to ensure that their formal financial system consider or bring all the financially excluded population into the money economy.

Various arguments exist in literature regarding digital financial payments systems and financial inclusion. Evidently in developing countries where people have been brought into the formal financial system through digital platforms, access to financial digital services has more than doubled since the majority use cell phones and internet connections (Senou et al., 2019). Compared to low-income societies with bias on usage of digital services (Ozili, 2018), in developing countries, the easy-to-use digital platforms offered by financial service providers especially to rural communities have raised confidence levels of the hitherto financially excluded poor people to use digital financial services (Bede Uzoma et al., 2020). Reportedly such slow pace of uptake to digital financial services has been caused by a number of factors including high transaction fees, financial illiteracy, irrational attitudes to latest technological innovation and religious concerns, (Ozili, 2018). The same source alleges for example that Muslims accept and use only financial products that realm with their Islamic law (sharia) (Demirguc-Kunt et al, 2014). The worst effect from such religious beliefs to financial system growth, is or are clauses that forbid earning of interest on the offered financial products. Another key aspect that tends to keep the majority unbanked is the tendency for most financial service providers to direct their marketing activities to middle or high-income customers, especially where they perceive that low-income customers are not capable of affording the digital financial service costs (Ozili, 2018). The outcomes of this of course, are not good for countries geared towards building inclusive financial systems because this practice by profit-minded financial service providers excludes a big segment of society. A public-private partnership between banks and government can exist to have youths specific support mechanisms that help minimize obstacles to access and usage of financial resources. Moreover, most rural populace doesn't trust digital service channels run by financial service providers for many reasons related to data privacy and security, or even the fact that most developing countries don't have consumer protection services (Malady, 2016). That means that illiterate customers intentionally limit their usage of digital services which gravely affect financial inclusion. As a solution however, Mouna and Jarboui, (2021) propose

that cooperation exists between governments and financial institutions in minimizing obstacles to access and usage of financial resources.

Previous studies have shown various evidences to show that digital financial payment services have a big relationship with financial inclusion. For example we see that after incorporating digital payment system indicators like credit card access, borrowing, mobile money accounts, electronic payments, and economic and demographic factors (age, income, education, and gender) into the model, Ocharive and Iworiso, (2024) observed statistically significant evidence between digital financial services and financial inclusion. Arguably, these digital financial services *"offer cost-effective and efficient alternatives to traditional banking"* which in the long run facilitate greater economic participation. The same effects were observed by Al-Smadi, (2023) just like Ene, Abba, and Fatokun (2019) using two proxies for electronic banking (i.e the number of ATMs used per year and the number of point-of-sales (POS) machines used a year). Additionally, Fanta and Makina (2019) using data from 186 countries, report a positive and significant impact between automatic teller machines (ATMs), internet technology and access and use of financial services. Also using data from 43 sub-Saharan African countries, Kouladoum, Wirajing, and Nchofoung (2022), reported that digital technology indicators have a positive effect on financial inclusion (number of bank accounts per 100,000 adults, the number of bank branches, and ATMs users per 100,000 adults), just like Bede Uzoma et al. (2020) and Siddik and Kabiraj (2020). These studies portray context differences for example Al-Smadi, (2023) relied on annual data on 12 countries in the MENA region over the period 2004–2020, Agyekum, Reddy, Wallace, and Wellalage (2021) measured digital service indicators using a sample of small and medium-size enterprises in Southeast Asian countries, Bede Uzoma et al. (2020) used data from 27 sub-Saharan African countries, while Shen et al.,(2020) examined financial digital services in China.

Accordingly, as unveiled in the above literature review, no prior study has been conducted on digital financial payment systems on financial inclusion of youth in Rwenzori region. To achieve the study objective, we hypothesized: thus

Hypothesis 1

Digital financial payment systems have a positive effect on financial inclusion among the youths in Rwenzori region.

MATERIALS AND METHODS

Public good theory of financial inclusion is premised on the big assumption that every member of society has a natural right to access and use financial services (Ozili, 2020b). This study capitalizes on this to firmly believe that indeed finance is a force for good where no one is supposed to be left behind. It therefore means that national governments have an obligation to ensure that existing national financial frameworks and formal financial systems bring all the financially exclude population into the money economy. Indeed, this inclusive financial system cause is supported by United Nations in its 2015 Agenda for Sustainable Development Goals where it pledges to "leave no one behind". It is the belief that financial inclusion is a key element of the agenda (G20/GPFI, 2017) and that greater access to financial services supports inclusive development in multidimensional ways (Klapper, El-Zoghbiand Hess, 2016). However, since the existing financial frameworks in most if not all low-income countries including Uganda, marginally consider the youths, as researchers we are concerned to having this reality of involuntary financial exclusion brought to the notice of policy makers. To achieve this objective, we conceptualized this study looking at the effects of digital financial payment systems on financial inclusion of youth in Rwenzori region. This

region covering district of Kyegegwa, Kyenjojo, Kamwenge, Kabarole, Bunyangabu, Ntoroko, Bundibugyo, Kitagwenda and Kasese has been chosen for the study because of numerous reasons; 1) falls along the touristic Rwenzori Mountains National Park whose existence restricted people in the neighborhood from settling in land above 2300m constituting economic disadvantage since they don't use park land for their traditional farming needs (Wells & Brandon, 1992; Muhumuza, 2014); 2) demographically 18.3% and 21.9% of its youths aged 18-23 and 10-17 respectively are illiterate (UBOS, 2019); 3) lies on the border line with Democratic Republic of the Congo (DRC) a geographical factor that would constitute an advantage, however the area has been a victim of the conflict in Democratic Republic of Congo (DRC) known for harboring Allied Democratic Forces (ADF) rebels who at times disrupt business operations in the area. The study is hoped to call for action from government and other policy makers to readjust in the existing financial frameworks to consider the youths' development needs as part of poverty reduction and ensuring sustainable socio-economic development.

To interrogate the variable under consideration, the study used a convergent parallel mixed-methods approach in line with assumptions of the critical realism philosophy on which this study is hinged. The study considers as a participant for the quantitative design any district youth council member in districts in Rwenzori region as mentioned above. The study also considers for the qualitative study CEOs from selected Banks and MFIs who provide credit and financial services for youth. The study used simple random sampling to identify 254 youth council members from districts and purposive sampling to identify 11 respondents from Banks and MFIs. Guided by Krejcie and Morgan (1970) sample size determination table, the study sample of 278 was taken and considered as affair representation of the population given the available resources and geographical coverage of 9 districts where the majority population of youth are drawn. Research assistants were used to collect data using assisted questionnaire (for Kobo collect software) and conducting interviews using interview guides among key informants and documentary review on key documents in line with study objectives. The research instruments were pre-tested to confirm the question relevancy and checking consistency carrying out validity and reliability tests. Normality tests were also carried out to check the data distribution and to inform the choice of data analysis technique. For the final study the descriptive data from Kobo collect was transferred to SPSS for further processing and inferential analysis. All these were preceded by seeking ethical approvals for purposes of adhering to research ethical standards.

FINDINGS

Response Rate

The study distributed 254 copies of questionnaires to youth council members. Out of these only 186 copies were received from the field representing a successful response rate of 73% as indicated in table 1 below.

Table 1: Questionnaire Administration Response Rate

Questionnaire	Frequency	Percentage (%)
Completely filled and returned	186	73.23%
Non-response	68	26.7%
Total	**254**	**100.0%**

Source: Field Survey, (2025)

In-depth interviews were carried out on 11 respondents who were CEOs of banks and micro-finance institutions to supplement the quantitative data.

Demographic Information of Respondents

The study generated frequency distributions to assess the demographic characteristics of youth in Rwenzori region. Table 2 below shows details regarding respondents' gender, education and district of residence.

Table 2: Gender, Education and Residence of Respondents

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		14	7.5	7.5	7.5
	Female	62	33.3	33.3	40.9
	Male	110	59.1	59.1	100.0
	Total	**186**	**100.0**	**100.0**	

Education Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		46	24.7	24.7	24.7
	a. diploma/ Certificate	42	22.6	22.6	47.3
	b. Masters	13	7.0	7.0	54.3
	c. Others	31	16.7	16.7	71.0
	d. Bachelors	54	29.0	29.0	100.0
	Total	**186**	**100.0**	**100.0**	

District of Residence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid		24	12.9	12.9	12.9
	a. Bunyangabu	27	14.5	14.5	27.4
	b. Kasese	53	28.5	28.5	55.9
	c. Kabarole	66	35.5	35.5	91.4
	d. Kyenjojo	16	8.6	8.6	100.0
	Total	**186**	**100.0**	**100.0**	

Source: Primary Data 2025

As shown in table 2 a significant portion of youth (59%) who participated in this study were males, with bachelors' degrees (29%) and residing in Kabarole district (35%). Figure 1 below indicates that most of the youth surveyed were in the ages ranging from 26 - 30 years.

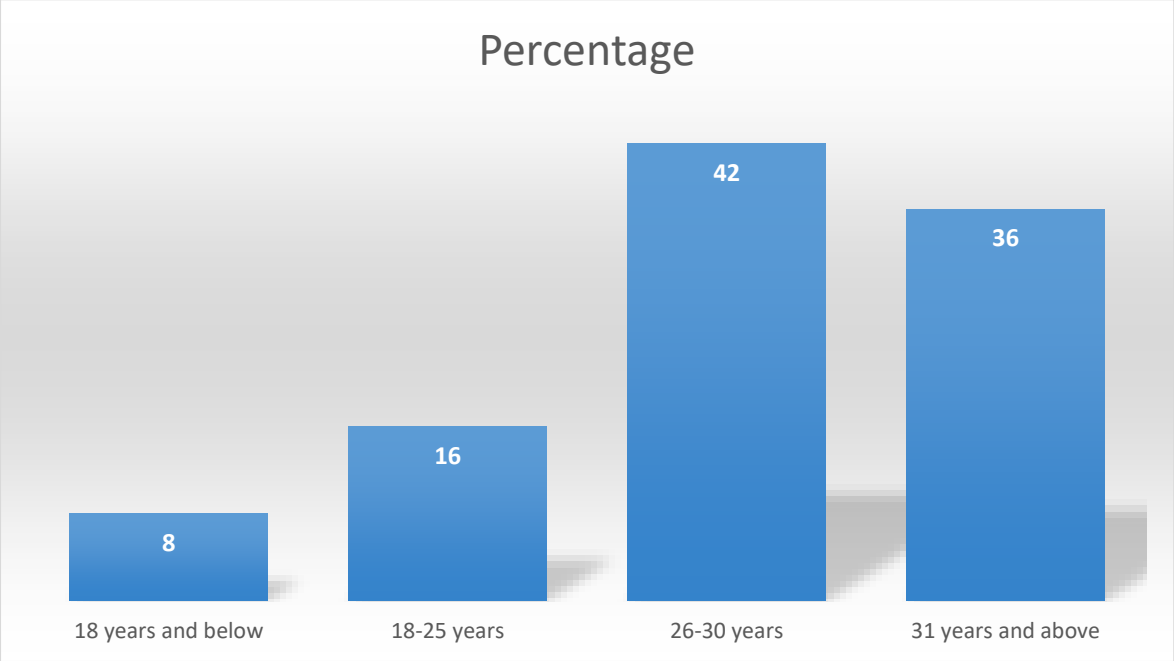

Figure 1: Age of Respondents

Digital Financial Payment Systems in Terms of Identified Indicators

Indicators identified under digital financial payment systems include smart phone (mobile wallet), internet access, bank digital platforms and banking agents accessed and used by youth in Rwenzori region. The study used a five-point Likert scale to generate the description as indicated Table 3 below. It was ordered in such a way that 1 represented Strongly Disagree, with 2 representing Disagree, 3 Uncertainty, 4 Agree and 5 Strongly Agree, where by if the generated mean is close to either 1 or 2 it reflected disagreement with the item at hand, whereas a mean close to 4 or 5 indicated respondent' agreement with the item. Uncertainty was also assessed where a mean close to 3 reflected some degree of uncertainty with the item at hand.

Table 3: Descriptive Statistics on Digital Payment Systems Measurement

	N	Minimum	Maximum	Mean	Std. Deviation
1. I have a smart phone (mobile wallet)	186	4	5	4.70	.458
2. I easily access internet	125	3	5	3.84	.700
3. I use my phone to connect with my bank account	150	2	4	3.42	.637
4. Find it easy-to-use bank digital platforms	125	2	4	3.41	.636
5. I use banking agents to access banking services	125	1	4	2.76	1.125
Valid N (listwise)	**125**				

Study results as indicated in table 3 reveal that on average youth have smart phone (mobile wallet) (Mean=4.70), easily access internet (Mean=3.84), uncertain on using their phones/

bank digital platforms to connect to their bank accounts (Mean=3.42) and rarely use banking agents to access banking services(Mean=2.76).

Table 4: Descriptive Statistics on Financial Inclusion in Terms of Identified Indicators

	N	Minimum	Maximum	Mean	Std. Deviation
1. I have an account in the bank	186	2	5	4.26	1.044
2. There are many financial service providers in our area	125	2	5	3.98	.602
3. I have an ATM and use it to access financial services	125	1	5	3.23	1.386
4. It is easy for me to borrow from the bank	125	1	5	1.86	1.322
5. I access bank services using my phone	186	1	4	2.64	1.240
6. I fear transacting with my phone because of costs	125	1	3	2.10	.884
7. I don't trust online bank platforms	125	1	4	2.43	1.207
8. I have a loan in the bank	150	1	5	1.42	1.226
9. Most digital financial services are expensive for me	125	1	5	2.85	1.561
10. My religion does not allow having an account in the bank	105	1	5	1.32	1.090

As shown in table 4 the findings indicate that youth have accounts in the bank (Mean=4.26), agree that there are many financial service providers in their area (Mean=3.98), but were uncertain about having ATM to help them access financial services (Mean=3.23). Furthermore, the study found out that youth in Rwenzori region find it difficult to borrow money from the bank (Mean=1.86). This was reemphasized during in depth interviews,"[…..] …..*banks ask for collateral security in form of land titles or agreement which we don't have as youth*". Yet in another in-depth interview the respondent talked about the narrative that people have on them...[….] .. *"they call us 'abayayi'"* meaning hooligans who cannot be trusted.

Another section of the youth fear to transact with banks using their phone because of different reasons including, costs associated (Mean=2.10), don't trust online bank platforms (Mean=2.43), are expensive (Mean=2.85).

Pearson Correlation Results

Table 5: Linear Regression Analysis

1. **Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.306[a]	.201	.290	5.39819

a. Predictors: (Constant), DPSs

2. **ANOVA[a]**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24598.274	1	24598.274	844.129	.000[b]
	Residual	5361.838	184	29.140		
	Total	**29960.113**	**185**			

a. Dependent Variable: Financial Inclusion
b. Predictors: (Constant), DPSs

3. **Coefficients[a]**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.392	.201		1.567	.119
	DPSs	.240	.046	.306	29.054	.000

a. Dependent Variable: Financial Inclusion

$R = 0.306$; $R^2 = 0.201$; $T_{(503)} = 29.054$, $p<0.05$

Source: Field Results (2025)

The study performed a linear regression analysis in order to assess the influence of digital financial payment systems on financial inclusion of youth in Rwenzori region. As portrayed in table 5 above, regression results, digital financial payment systems have a positive and significant influence on financial inclusion ($\beta = 0.306$, $t_{(603)} = 29.054$, $p<0.05$). Apparently the coefficient of determination (R-squared) is 0.201 which explains the power of digital financial payment systems to cause 20.1% of variations in financial inclusion of youth in Rwenzori region. The probable explanation for the rest of the variability i.e 79.9% could be that other factors which this study ignored accounted for this. More still, it is evident that the relationship strength between digital financial payment systems and financial inclusion is 0.306 ($R = 0.306$, $p<0.05$) portraying a weak positive and significant effect between digital financial payment systems and financial inclusion of youth in Rwenzori region.

The realized P-value of 0.000 testifies a statistically significant relationship at $p<0.05$ between digital financial payment systems and financial inclusion. It signifies that the relationship between digital financial payment systems and financial inclusion is statically significant and positive. Hence the regression equation depicting the influence of digital financial payment systems as independent variable and financial inclusion as a dependent variable is expressed as follows:

FI = 1.392 + 0.240 DPSs ……..……Equation (i)
Where:

FI=Financial Inclusion

DFPSs = Digital financial payment systems

Such regression equation depicting a constant term of 1.392 implies that in the real world when DFPSs is constant at zero, financial inclusion among youth in Rwenzori region will be at 1.392. The direct meaning is that without DFPSs, youth financial inclusion in Rwenzori region will be 1.392. As indicated above the coefficient of DFPSs is 0.240 implying that a change of a unit in DFPSs influences change of 0.240 units in the financial inclusion of youth in Rwenzori region.

Such results suggest that DFPSs have significant influence on financial inclusion leading to acceptance of the alternative hypothesis stated in this study "*Digital financial payment systems have a positive effect on financial inclusion among the youths in Rwenzori region*".

Discussion

The hypothesis testing results reveal that DFPSs have significant influence on financial inclusion among the youths in Rwenzori region. This finding supports a study conducted by Demirguc-Kunt et al., 2018); who report that changes in the digital financial service space have positively impacted on the hitherto financially excluded groups enabling delivery of a wide range of financial services to them. The reason behind this is that as financial institutions digitize the financial services, transactional costs reduce making access to financial products easy (Scott, Van Reenen, & Zachariadis, 2017). This explains the possibility for increased economic benefits to the country as individual participation in a financial system increase especially when they gain ability to start businesses. More evidences exists in literature portraying that digital financial services impact significantly on financial inclusion, for example when Ocharive and Iworiso, (2024) incorporated digital payment system indicators like credit card access, borrowing, mobile money accounts, electronic payments, and economic and demographic factors (age, income, education, and gender) in their model, they observed statistically significant evidence between digital financial services and financial inclusion. Related findings are reported by Al-Smadi, (2023) and Ene, Abba, and Fatokun (2019) using two proxies for electronic banking (i.e the number of ATMs used per year and the number of_point-of-sales (POS) machines used a year). Additional support was found for the result obtained from the findings by Fanta and Makina (2019) after using data from 186 countries-they also observed a positive and significant impact between automatic teller machines (ATMs), internet technology and access and use of financial services. More supports were found for the results of this study hypothesis in the works of Kouladoum, Wirajing, and Nchofoung (2022) who investigated 43 sub-Saharan African countries and reported the positive effects that digital technology indicators have on financial inclusion (number of bank accounts per 100,000 adults, the number of bank branches, and ATMs users per 100,000 adults), just like Bede Uzoma et al. (2020) and Siddik and Kabiraj (2020).

CONCLUSION AND RECOMMENDATIONS

Conclusion

With a reflection on public good theory of financial inclusion which guided this study we argue that every member of society has a natural right to access and use financial services (Ozili, 2020b). Even when there are differing opinions/view in regard to the extent to which the youth can be included in the monetary economy, the contribution of digital financial payment systems on financial inclusion has been confirmed by the present study. From the findings of this study the positive effect of digital financial payment systems on financial inclusion of youth in Rwenzori region were confirmed, thus achievement of the study purpose. This study capitalizes on this finding to firmly believe that indeed finance is a force for good where no one is supposed to be left behind. It therefore means that national

governments have an obligation to ensure that existing national financial frameworks and formal financial systems bring all the financially exclude population into the money economy. The study contribution to financial inclusion literature is three-way focused: 1) evidences on the relevance of digital financial payment systems on youth participation in the monetary economy, 2) portrays a message to the government on the imperative of revising existing financial frameworks to consider youth in the national financial planning since this has riffle effects on business growth, revenue collection capacity and GDP of Uganda, 3) commercial banks and other financial institutions are reminded to reconsider the need to have youth-focused programs not only for economic benefit but for social entrepreneurship reasons.

Recommendations

Specifically, this study only concentrated on digital financial payment systems, as a predictor of financial inclusion. This constitutes one source of its limitation because it left out other factors that impact on financial inclusion. As evidenced above a relatively minor contribution of 20.1% to the model in terms of variation in financial inclusion is reported reflecting a gap that future researchers can address by probing other factors not considered by this study. Again financial inclusion is a pervasive concept that talks about everyone since participation in a monetary economy is everyone's concern, however this study considered only the youth. Future studies can extend their study focus to other segments of society including women and the disabled.

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