

# GENDER NORMS AND DEMOGRAPHICS IN ENTREPRENEURSHIP AND DIGITAL FINANCIAL SERVICES UTILIZATION

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## ABSTRACT

This study sought to estimate gender norms and demographics in entrepreneurship impact in the utilization of digital financial services (DFS) in the context of Kenya using the 2021 FinAccess Survey, which is a joint initiative of the Kenya National Bureau of Statistics (KNBS), Financial Sector Deeping (FSD) Kenya, and the Central Bank of Kenya (CBK). It also aims to identify the obstacles and difficulties that women encounter when embracing and utilizing digital financial services. The study employed the Probit Model to identify the gender differences in access to DFS in Kenya. Consumer behavior theory was used to determine consumer demand for digital financial services (DFS). The findings showed that education level, gender, digital credit, mobile ownership, age, and income levels significantly explain the utilization of diverse digital financial services, including digital credit. A significant 78 percent of the population was found to have adopted digital financial services (DFS). The study recommends robust enactment and implementation of policies with a sole focus on the adjustment of income, mobile acquisition, and improvement of education levels amongst individuals, which would enhance the usage and access of digital financial services in Kenya, particularly among women. To overcome mobile ownership barriers, subsidized smartphone initiatives and expansion of network coverage in rural and underserved areas have emerged as pivotal strategies. These actions would effectively improve access to digital financial services by increasing mobile ownership, particularly among women. This study adds to the expanding corpus of research on gender studies and digital financial services. Scholars, researchers, and academics interested in these fields will be invaluable resources.

**KEYWORDS:** Gender norm; digital financial services; demographics in entrepreneurship; probit model regression.

**JEL CLASSIFICATION:** M15, M21, M16

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## INTRODUCTION

Gender norms in financial inclusivity still subsist in Sub-Saharan Africa despite concerted strides to drive economic opportunities, equity, and equality for women, more so with the adoption of Digital Financial Services (DFS) (Chamboko et al., 2018; Parlasca, 2022). Current empirical (Johnen & Mußhoff, 2023; Were et al., 2021) elaborates that, in the African region of sub-Sahara, there are notable disparities in the ways in which men and women use financial services. Men are more prone to use DFS than women, which is reflected in the disparities in the items that they use. As women are more likely than males to employ informal services, it is possible that these services offer value that cannot be obtained through other means. According to the data, men are more likely than women to initiate transactions by way of mobile and to load airtime. However, contrasting women's gender to the male gender, in terms of mobile money usage, women are likely to use mobile to obtain and store value.

DFS has revolutionized the financial landscape in Kenya and across the globe (Tiony, 2023; Ndung'u, 2018). Kenya became the pioneer in innovating mobile money services by developing M-Pesa, whose operations began in the year 2007. After the launch of MPESA, digital financial services have become an integral component of the financial ecosystem, bringing about a wider range of services such as mobile banking, online payments, savings, and credit. The rapid growth and adoption of these services have had a profound impact on financial inclusion and economic development in Kenya.

Over the last ten years, there has been a substantial evolution in Kenya's financial sector, and this evolution has been greatly influenced by digital financial services' pivotal role in expanding financial inclusion. The FinAccess survey, conducted in 2021, has four pillars of financial inclusion measurement: impact/welfare, quality, usage, and accessibility. According to the 2021 Survey, formal financial inclusion increased from 82.9 percent in 2019 to 83.7 percent in 2021 when measured by the access dimension. The proportion of financial inclusion in the 2006 baseline survey is 26.7%. The percentage of adults who were denied access to formal and informal financial services and products by providers increased from 11.0 percent in 2019 to 11.6 percent in 2021 (FSD, 2021).

Financial Sector Deepening survey of 2021 demonstrated that 41.3% of the respondents accessed formal and informal financial services. The survey outcome signaled that there have been minimal deviations in gender-based access to financial services, with the gap closing from 8.5 percent in 2016 to 4.2 percent in 2021. This has allowed women to participate more actively in formal economic activities. Financial technology benefits everyone, even those in the lowest quintile of wealth and those without formal education. The results of the survey also show that in comparison to 2019, there was a decrease in monthly usage of mobile money in 2021 but an increase in daily and weekly usage. The reasons for this could be as follows: the government's stance on cashless transactions to stop the COVID-19 epidemic from spreading, the function of mobile money in meeting families' monetary needs, the waiver of transaction fees on mobile money, and users' self-caution during the pandemic.

While Kenya has made commendable progress in advancing financial inclusion through digital financial services, gender disparities in access and utilization continue to be a significant concern (Reynolds et al., 2023; Githu, 2023; Wandeda, 2023). The primary focus of this study was to address the gender disparities and demographics in digital entrepreneurship that currently exist in using digital financial products and services. It tries to keenly scrutinize the level of these gender deviations in Kenya's usage of digital financial services.

## **1 LITERATURE REVIEW**

Pazarbasioglu et al., (2020) highlighted that for a country to minimize poverty and upscale economic progress, it is significantly of importance to have affordable access to and usage of financial services. Nations with more complex and sophisticated financial systems experience more economic advancement and significant reductions in the rates of poverty and inequality. Financial service accessibility also strengthens the resilience of impoverished communities, particularly women, and increases opportunities. Even in most developed economies, 65% of individuals lack access to the most basic transactional accounts, which limits their capacity to send and receive money securely and effectively.

According to Agur et al. (2020), a significant amount of emphasis has been placed on digital financial services because of the COVID-19 outbreak and the need to maintain social distancing. These programs enable governments to effectively disburse funding to individuals needing immediate assistance by facilitating social distancing. Amidu (2023) explored the correlation between gender dynamics, digital financial services (DFS), and vulnerability to COVID-19 within informal settlements. Employing the ordinary least squares (OLS) analytical approach, this study unveiled that men residing in informal settlements showed a higher probability of encountering individuals who had contracted COVID-19 or had succumbed to it compared to women. However, due to social inequalities, women are at greater risk during the pandemic.

Borgonovi et al. (2018) reported that various factors support the digital gender gap, strengthen the foundation of evidence for policymaking, and offer policy guidelines for contemplation in all the G20 nations. The study concluded that barriers to accessibility, expenses, low levels of education, and the existence of deeply rooted prejudices and social standards prevented women from fully utilizing the potential brought about by the digital revolution.

Antonijević et al.,(2022) study compared and contrasted males and females in seven financial inclusion-related sectors: One, that own a financial organization's account; Two, maintaining savings within a financial organization.; Three, obtaining credit from a financial institution; Four, having a credit card; Five, accessing an account via a mobile device or the Internet; Six, using the Internet to make purchases or pay bills; and seven, sending and receiving digital payments. Statistically significant disparities in financial inclusion between males and females across all study segments were observed. In light of the observation, the researcher stressed the recommendation to several governments, such as those in Saudi Arabia, Kenya, Turkey, Hong Kong, Italy, Spain, Trinidad and Tobago, and Bahrain, to formulate comprehensive strategies for financial inclusion. These plans should prioritize improving and expanding women's financial participation, specifically by facilitating digital payment methods and improving accessibility and usage of bank accounts.

Reynolds (2023) undertook an investigation on disparities arising between genders in awareness of and acceptance of mobile money in eight nations categorized as mid-low incomes. It was of interest to point out that in these places, men's accessibility to bank accounts and acquisition of phones insinuated stronger correlations with MM usage than women. Furthermore, in these regions, gender disparity in MM adoption has grown over time. Zwane et al.'s (2023) study investigated whether and in what ways male and female users of online banking in an emerging economy like Swaziland have varying perceptions regarding the use of online banking systems. A self-administered survey was employed to gather information from over 280 banking clients in two Swaziland regions. The results indicate no notable differences between male and female customers. Nevertheless, both genders expressed discomfort and dissatisfaction with the current online banking system in Swaziland.

Ghosh (2022) uses district-level survey data analysis to examine how technology impacts the advancement of financial inclusion for women in India. According to the research, women are less likely than males to open accounts using a phone and are only 9% more likely to actively utilize their mobile phone accounts. According to Yeyouomo et al. (2023), from 2011 to 2017, fintech companies in Sub-Saharan Africa (SSA) have a significant impact on eliminating gender disparities in financial access. The focus of this study is financial innovation in underdeveloped nations. A multilevel Tobit regression model was used to analyze panel data and provide the empirical findings. The study's outcomes indicate that fintech companies help narrow the gender disparity in financial inclusion by addressing gender gaps in accessing and utilizing financial services.

Were et al. (2021) used regression and descriptive analyses to examine the differences between genders in Tanzania's financial inclusion. With the advent of mobile phone money services, access to and usage of formal financial services have improved, particularly for women, yet the sector is still lagging behind. Using data from the 2017 FinScope Tanzania survey, the study outcome highlighted that married women had less chances than men to utilize mobile money and banking services. Kamau et al. (2023) assessed gender differences by contextualizing Kenya's up surging acceptance of digital financial services by investigating the link between high debt levels and financial literacy. Analysis was done on data from the FinAccess Household Survey 2021's primary and secondary data sources. The results show that there exists a decline in the gender differences in financial services usage and accessibility.

Wandeda et al. (2023) conducted a study to find out if there existed a correlation between digital financial inclusion and financial well-being in the context of Kenya with a focus specifically on gender

differences. Overall weighted average efficacy of digital financial inclusion on Kenyan women's financial well-being was estimated, and propensity score matching techniques were used to assess the likelihood that these women would adopt it. The study found that several sociodemographic characteristics, including age, area of residence, education level, marital status, and religion, had an impact on women's adoption of digital financial services through the analysis of data from 22,024 households in the Financial Access Survey 2021.

Mushtaq et al., (2023) analyzed the knowledge framework of research related to women's financial inclusion and provided a comprehensive summary of the studies conducted in this domain up to the present. A bibliometric analysis of 235 publications indexed in Scopus was conducted. In this investigation, VOSviewer was used to perform reference co-citation analyses, evaluate keyword networks, examine co-authorship trends, and examine citations. Prominent figures in the subject were identified by this investigation, with Ghosh emerging as the most prolific author. The analysis also identified the top journals—World Development in particular—in this field.

Khera (2022) provided an illustration of how the expansion of digital financial services, which encompass financial transactions carried out via mobile devices or the Internet, is transforming people's lives by increasing accessibility to financial services for disadvantaged populations. However, this transformation does not benefit all the demographics equally. There is a significant lack of representation of women in financial and technological fields. The authors suggest that broadening access to conventional financial services for both genders could diminish income disparities within countries, emphasizing that when more women gain access to these services, the benefits of reducing inequality become more pronounced.

In summary, these studies also highlight the critical need to improve educational opportunities for women in fields that are essential for the digital age as well as the need to address the societal and cultural barriers that prevent women from entering the financial services and digital technology sectors. It is also noted that there are differences in gender inequality between various markets and nations and that the use of mobile money is influenced by factors such as bank account accessibility and mobile phone ownership. Overall, these studies provide valuable insights into the multifaceted issue of gender disparities in financial inclusion and offer recommendations for policymakers, academia, and researchers to address these challenges.

### **1.1 Statement of the Problem**

A series of studies conducted in various regions explored gender disparities in financial inclusion. Studies have shown that when women try to use official financial services, they often face barriers. The disparities in income levels, financial knowledge, and accessibility of digital tools are among the variables that give rise to these hurdles. Policy recommendations have been made to address these issues, including improving women's education and financial literacy. Furthermore, it has been underlined how crucial it is to control the rapid expansion of digital financial services, particularly during emergencies, such as the COVID-19 epidemic (Agur et al. 2020). To address this imbalance in income distribution, there is a growing focus on enhancing the accessibility of conventional financial services. Fintech companies have been identified as having the potential to eliminate gender differences in financial access.

While Kenya has made commendable progress in advancing financial inclusion through digital financial services, gender disparities in access and utilization continue to be a significant concern (Reynolds et al.,2023; Githu,2023; Wandeda,2023). The primary focus of this study was to address the gender norms that existed in the usage of digital financial services. The researcher tries to closely examine levels of gender differences in Kenya's usage of digital financial services.

Prior studies highlight the dire need to strengthen educational opportunities for the female gender in critical fields for the digital era and the essence of sorting out the societal and cultural hindrances that curtail women from entering the financial services and digital technology sectors. It is also noted that there are differences in gender inequality between various markets and nations and that the use of mobile money is influenced by factors such as bank account accessibility and mobile phone ownership. Overall, these studies provide valuable insights into the multifaceted issue of gender disparities in financial inclusion and offer recommendations for policymakers, academia, and researchers to address these challenges.

### 1.2 Research Objectives

The main intention of this study was to determine the impact of gender norms and demographics in entrepreneurship on digital financial services utilization in Kenya. The following specific objectives will guide the study:

To ascertain the extent to which gender norms affect Kenya's digital financial service utilization.

To establish the controlling effect of demographic factors on Kenya's digital financial service utilization.

To examine insights and policy implications from the study

### 1.3 Research hypotheses

H<sub>01</sub> Gender norms do not have a significant influence on digital financial service utilization in Kenya.

H<sub>02</sub> Demographic factors do not have a significant controlling influence on digital financial service utilization in Kenya.

## 2 METHODOLOGY

Using a probit model and data from the 2021 FinAccess Survey, this study investigates how women use digital financial services. It also aims to identify the obstacles and difficulties that women encounter when embracing and utilizing digital financial services. This study also aims to determine how gender disparities impact financial inclusion in Kenya and how this knowledge can help policymakers and financial institutions expand their financial access to underserved populations. Understanding these implications is of utmost importance to policymakers and financial institutions seeking to expand their financial access to underserved populations. This section presents the materials and methods used to investigate gender differences in Kenya's utilization of digital financial services. This study focuses on consumer theory and employs an empirical model based on the probit model estimation using the 2021 FinAccess survey conducted by the Kenya National Bureau of Statistics (KNBS). This chapter also addresses the potential econometric models.

### 2.1 Theoretical Model

Consumer behavior theory determines consumer demand for digital financial services (DFS).

Consumers derive utility from consuming DFS. Utility,  $U$ , is a function of consumption and DFS.

$$U = (C, DFS) \quad (1)$$

The consumer wants to maximize utility subject to budget constraints.

$$Y = (CPC + DFSPf) \quad (2)$$

PC and Pf denote the price of other consumer goods and DFS, respectively. Maximizing the utility function subject to budget constraints provides the optimal DFS and other consumer goods levels. From equation (2), DFS utilization and, specifically, DFS services depend on the prices of DFS services, such as ownership of a mobile phone and other expenditures.

DFS utilization was assumed to be binary. The individual decides whether to utilize DFS services, and it can be assumed that in deciding to seek DFS, they compare the expected benefits from utilization and the expected benefits from non-utilization. An individual decides to seek DFS if the benefits outweigh the costs of non-utilization; that is,

$$DFS_i^* = (DFS_{A^*} - DFS_{N^*}) > 0 \quad (3)$$

Where  $DFS_i^*$  is an unobservable latent variable. We can only observe if an individual utilizes DFS services ( $DFS_i = 1$ ) or otherwise ( $DFS_i = 0$ ).  $DFS_i^*$  can be expressed as a function of observable characteristics as:

$$DFS_i^* = \delta'Z_i + u_1, \text{ with } DFS_i = 1 \text{ if } [DFS_i^* > 0] \quad (4)$$

Where  $DFS_i = 1$  if an individual seeks DFS services and zero otherwise;  $\delta$  is a vector of parameters to be estimated;  $Z$  is a vector of explanatory variables that DFS services utilization decision; and  $u_1$  is the error term with mean zero and variance  $\sigma^2$ . The probability of DFS utilization can be specified as follows:

$$Prob(DFS_i = 1) = Prob(DFS_i^* > 0) = Prob(u_1 > -Z_i\delta) = 1 - F(-Z_i\delta) \quad (5)$$

Where  $F$  is the cumulative distribution function for  $u_i$ .

## 2.2 Empirical Model

Gender differences in Kenya's utilization of digital financial services metrics were compared and analyzed using descriptive statistics, including means, standard deviations, and minimum and maximum values. The investigation utilized a correlation matrix to assess the magnitude and direction of the relationships among the independent variables. Regression models were used to statistically evaluate the importance of the different variables. We will estimate the following empirical model as follows:

$$DFS_i = \beta_0 + \beta_1 Gender_i + \beta_2 Controls_i + \mu_i$$

Where  $DFS_i$  is the dependent variable representing whether an individual utilizes digital financial services and 0 if otherwise,  $Gender_i$  is a binary variable representing gender (1 for male, 0 for female);  $Controls_i$  represents a vector of control variables including mobile phone ownership, income of the individual, internet use, access to digital credit, age and age squared, highest educational level of individuals, and residential status of individual  $i$  while  $\mu_i$  represents the error term.

## 3.3 Sampling Technique

The Kenya National Bureau of Statistics (2021) FinAccess survey was used in this investigation (KNBS). This household survey, which is nationally representative, offers data on household finances and related limitations with a focus on individuals aged 16 years and above living within conventional households in Kenya. The data is publicly available in the Kenya National Bureau of Statistics Website(<https://www.knbs.or.ke/>).

### 3 EMPIRICAL FINDINGS

The findings indicated that households had an average age of 39 years out of the 22024 respondents sampled in the study, with 66 percent residing in rural areas and 34% residing in urban areas. Regarding education, 18 percent had received no formal education, 40% had completed primary schooling, 30 percent had attained secondary education, and 12 percent had achieved higher education; less than 1 percent pursued other educational paths. Respondents with at least a primary education, in most instances, utilize digital financial services than those with no education.

A significant 78 percent reported using digital financial services (DFS) in the country. Additionally, 80 percent owned a mobile phone, 98 percent of respondents acknowledged utilizing digital credit services, and less than 2 percent did not use digital credit services. Interestingly, 85.3 percent of the respondents claimed that they had never used the Internet, with only 15 percent confirming its usage. The average monthly income of the respondents was Ksh.8301.

*Table 1 Descriptive Statistics*

Variable	Obs	Mean	Std. Dev.	Min	Max
Digital financial services utilization	22024	0.776	0.417	0	1
Gender	22024	0.59	0.492	0	1
Age	22024	38.897	17.212	16	116
Monthly income	19619	8301.659	12614.768	100	400000
Mobile ownership	22024	0.804	0.397	0	1
Education					
None	22024	0.181	0.385	0	1
Primary	22024	0.402	0.49	0	1
Secondary	22024	0.301	0.459	0	1
Tertiary	22024	0.115	0.319	0	1
Other	22024	0.001	0.034	0	1
Residence rural	22024	0.656	0.475	0	1
urban	22024	0.344	0.475	0	1
Digital credit					
Yes	22024	0.983	0.128	0	1
No	22024	0.017	0.128	0	1
Internet use					
No	22024	0.853	0.354	0	1
Yes	22024	0.147	0.354	0	1

(Source: own research)

### 3.1 Correlation Results

The investigation utilized the Pearson correlation matrix to assess the magnitude and direction of the relationships among the independent variables.

Table 2 Correlation Results

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) Gender	1.000											
(2) Age	-0.065	1.000										
(3) Monthly income	0.097	0.004	1.000									
(4) Mobile ownership	0.052	-0.008	0.176	1.000								
(5) No education	-0.141	0.304	-0.080	-0.179	1.000							
(6) Primary education	0.050	0.062	-0.166	-0.010	-0.382	1.000						
(7) Secondary education	0.038	-0.250	0.005	0.048	-0.304	-0.539	1.000					
(8) Tertiary education	0.036	-0.100	0.340	0.159	-0.169	-0.300	-0.239	1.000				
(9) Other	0.005	0.002	0.011	0.008	-0.015	-0.027	-0.021	-0.012	1.000			
(10) Residence	-0.009	-0.174	0.222	0.163	-0.143	-0.132	0.127	0.190	0.009	1.000		
(11) Digital credit	0.011	-0.055	0.078	0.058	-0.062	-0.068	0.022	0.146	-0.004	0.101	1.000	
(12) Internet use	0.041	-0.114	0.212	0.151	-0.177	-0.131	0.109	0.253	0.021	0.200	0.111	1.000

(Source: Survey Data 2024)

Table 2 indicates that there is no strong correlation that could potentially undermine the accuracy of the study's estimations. This is evident, as most of the correlation coefficients in the matrix are below  $|0.5|$ , signifying a lack of significant correlation between the variables being examined.

### 3.2 Model Results

Table 3 shows gender disparities in digital financial service utilization in Kenya. The results of the probit model are shown in the first column and the marginal effects are shown in the second column.

Table 3 Probit model regression and the marginal effects

	(1)	(2)
	Probit Model	Marginal Effects
Gender	0.0609** (0.0292)	0.00780** (0.00374)
Age	0.0987***	0.0127***



	(0.00403)	(0.000526)
Age squared	-0.000956***	-0.000123***
	(0.0000419)	(0.00000544)
Monthly income	0.0000182***	0.00000233***
	(0.00000248)	(0.000000320)
Mobile ownership	2.371***	0.304***
	(0.0327)	(0.00352)
Primary education	0.388***	0.0601***
	(0.0380)	(0.00636)
Secondary education	0.469***	0.0707***
	(0.0440)	(0.00706)
Tertiary education	0.985***	0.127***
	(0.0786)	(0.00930)
Other	0.484	0.0725
	(0.441)	(0.0554)
Residence	0.0476	0.00610
	(0.0331)	(0.00424)
Digital credit	1.072***	0.138***
	(0.287)	(0.0369)
Internet use	0.0261	0.00335
	(0.0485)	(0.00622)
_cons	-3.506***	
	(0.0936)	
N	22024	22024

Notes: Standard errors are in parentheses; \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ , and the no education category is the base category for the education variables.

(Source: own research)

The interpretation of the results is based on marginal effects because they are easy to compute and interpret. The gender variable significantly and positively influences the utilization of DFS. This showed that the likelihood of men utilizing DFS was higher than that of women by 0.78%. This could be due to societal expectations or norms that may impact financial decision-making, thereby limiting women's autonomy in financial matters. The results confirm our hypothesis that males had higher chances of utilizing DFS than their female counterparts. Additionally, this finding is in line with that of Chamboko et al. (2022) who stated that Gender norms in financial inclusivity still subsist in Sub-Saharan Africa despite concerted strides to drive economic opportunities, equity and equality for women, more so with the adoption of Digital Financial Services (DFS)

The relationship between age and the utilization of DFS displayed a significant and positive influence on individuals up to the turning point at 51.62 years of age. This suggests that the likelihood of DFS utilization is related to age in a U-shaped fashion ceteris paribus, with the usage of DFS increasing with age until reaching a turning point of  $tp = -((0.0127)/2 * -0.000123) = 51.62$  years. However, a negative and significant impact exists between age squared and use of digital credit services. This points to a non-linear effect. Therefore, as age increases by one year, the likelihood of using DFS is expected to rise by 1.3% up to the age of 51.62, and then this probability decreases in higher age brackets, as evidenced by the negative coefficients associated with age squares. These findings are supported by similar studies by Chamboko (2022) and Wambire (2020), reinforcing the observed connection between age and the adoption of digital financial services.

The income-related coefficients were positive and statistically significant. The use of DFS by an individual was significantly positively correlated with monthly income level. An additional income is associated with more DFS utilization. Conventionally, as income grows, individuals gain access to necessary technology for digital financial services. Higher earnings expand financial needs, prompting utilization of diverse DFS offerings. Increased income often correlates with greater comfort and familiarity with digital tools, fostering adoption of DFS. These results are in line with those of the earlier studies by Kamau et al. (2023) and Tiony (2023).

The ownership of mobile devices demonstrates a clear and meaningful positive effect with the utilization of digital financial services (DFS). More precisely, an individual possessing a mobile device showed a 30 percent increase in the likelihood of utilizing digital credit services. This finding aligns with that of a previous study by Parlasca et al. (2022), Muthiora (2015), and Pazarbasioglu (2020) identified a significant and positive relationship between mobile ownership and the utilization of digital financial services.

From this study, educational background significantly directs personal engagement with digital financial services. Individuals with primary education have a 6% chance of utilizing DFS in contrast to those with no formal education, while those with tertiary education exhibits a 7.1% likelihood compared to individuals without any education. Remarkably, among varied educational levels, those with tertiary education notably demonstrate a significant 12.7% likelihood of using DFS in contrast to those without education. Additionally, individuals with alternative educational backgrounds show a 7.3% probability compared to those lacking any education. This result emphasizes the importance of education to gain the utilization of digital credit services. Therefore, raising educational attainment may result in an increase in the nationwide use of digital financial services (Roy & Patro, 2022). This result conformed with findings of Kamau et al. (2023) investigation, which portrays a critical role that formalized education, and most importantly financial literacy, plays in upscaling usage of digital financial services in Kenyan context.

There is a notable positive and significant influence between digital credit and DFS utilization. For digital credit, there is an anticipated 14 % increase in the use of DFS. The results are in line with the literature by Bazarbash and Beaton (2020). Our research shows variables such as place of residence and internet usage were found to be statistically significant. This means that they do not influence DFS utilization.

## **CONCLUSIONS**

The exploration of gender disparities in digital financial service (DFS) utilization in Kenya, based on the 2021 Kenya National Financial Access dataset, uncovers compelling insights. With 78 percent reporting DFS usage, the study underscores a notable gender gap, revealing a higher prevalence among men than women. Key influencers driving DFS utilization encompass age, income, education, and mobile device ownership. Specifically, men and individuals with higher income, education levels, and mobile devices exhibit greater inclination toward DFS, notably digital credit. Education emerges as a critical factor, indicating contrasting usage patterns between those with and without formal education backgrounds. Surprisingly, despite expectations, area of residence and Internet access show no correlation with DFS utilization. These findings illuminate the need for targeted interventions to bridge gender-based disparities and enhance accessibility to digital financial offerings, laying emphasis on formalized education and mobile device acquisition as pivotal avenues for accelerating financial inclusion in Kenya. To improve DFS, tailored financial literacy programs should be established to engage community leaders and NGOs to ensure widespread comprehension of the benefits and responsible use of digital credit. Accessible microcredit schemes designed for women could be facilitated through partnerships

between financial institutions and community organizations, offering reduced interest rates, or special initiatives focused on income-generating activities. Moreover, incentivizing women entrepreneurs through tax breaks or grants to engage in digital financial services could further drive their participation in the formal financial sector.

## RECOMMENDATIONS

The significance of education level, gender, digital credit, mobile ownership, age, and income levels in explaining the utilization of diverse digital financial services, including digital credit, has been established. Policies targeting the enhancement of income, mobile ownership, and educational attainment among individuals could facilitate the utilization of Kenya's digital financial services and more so amongst female gender. Pivotal strategies that have merged in order to overcome barriers related to mobile acquisition, the adaptation of subsidized smartphone initiatives and wide coverage of network in remote, rural and underserved residences have emerged. These agendas would subsequently accelerate accessibility and usage of digital financial services by improving mobile acquisition, particularly among female gender. Additionally, laying advocacy for gender-inclusive mobile policies and customized offering packages from mobile network operators can contribute greatly in narrowing the existing digital financial services adoption gap.

Educational initiatives are equally vital, necessitating the development of digital literacy training programs specifically aimed at women. These programs would empower women to navigate digital platforms confidently, thereby facilitating better access to educational resources and financial tools. Collaborations with educational institutions to deliver discounted educational content through mobile platforms, using digital credit, can also be instrumental in encouraging learning among women. Additionally, integrating financial education curricula in schools, emphasizing digital finance and credit management, could instill responsible financial habits and enhance financial literacy at a young age.

To improve income, tailored financial literacy programs should be established to engage community leaders and NGOs to ensure widespread comprehension of the benefits and responsible use of digital credit. Accessible microcredit schemes designed for women could be facilitated through partnerships between financial institutions and community organizations, offering reduced interest rates, or special initiatives focused on income-generating activities.

Moreover, incentivizing women entrepreneurs through tax breaks or grants to engage in digital financial services could further drive their participation in the formal financial sector

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