

FINANCIAL TECHNOLOGY ACCESS AND HOUSEHOLD WELFARE IN KENYA: A CASE OF GREEN PARK ESTATE, NAIROBI COUNTY, KENYA

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ABSTRACT

The development of digital financial services has transformed transactions and financial access, particularly in developing countries. However, access to these services remains uneven, impeding economic engagement and welfare development. This study focuses on the impact of financial technology access on household welfare within Green Park Estate, Nairobi County, Kenya, addressing the disparities and exploring avenues for inclusive progress. The specific objective was to determine the effect of access to electronic payment systems on household welfare in Green Park Estate, Nairobi County. The study used the Social Capital Theory. It employed a descriptive research design and targeted 500 households in Green Park Estate. Cochran formula, which was used to reduce the sample to 157 respondents. Simple random sampling technique was used to select the sample respondents. Data analysis was conducted using SPSS version 25, and the findings were presented using charts and tables. The study findings revealed that access to electronic payment systems had a positive impact on household welfare. Electronic payment systems enabled households to better manage their payments, and financial savings innovations positively correlated with household welfare. Based on the study findings, the researcher recommended that financial institutions should work to mobilize more households to fully adopt technology in their financial systems. Financial organizations should collaborate with households in Upper Savanna to develop better financial savings innovations, and the government should provide cheap loans to households to protect them from exploitation. Further studies should also be conducted to determine how these variables affect household welfare.

Keywords: *financial technology access, house welfare, Nairobi County, digital financial services*

INTRODUCTION

Financial technology refers to pre-conditional infrastructure for effective financial inclusion with development of new computer and communication technologies as well as

financial savings systems, goods, and procedures (Alexander 2017). Some of the aspects of financial technology include digital payments, personal finance management, crowdfunding and online lending. The field of financial technology (fintech) is a blend of finance, technology, and management, aimed at delivering innovative solutions for financial services. These solutions can either enhance existing services or create new business models, as noted by Leong & Sung (2018). The first generation of fintech relied on crucial enabling technologies, such as the Trans-Atlantic transmission line and mainframe computers, which gave rise to SWIFT and ATMs.

Household welfare refers to the overall well-being and living standards of a household or a group of individuals living together. It is a multidimensional concept that considers various factors such as income, consumption, access to basic necessities, health, education, housing, and social protection (World Bank, 2021). Measuring and analyzing household welfare is crucial for policymakers and researchers to understand the economic and social conditions of households and make informed decisions to improve their living standards. The assessment of household welfare often involves the use of indicators and indices, such as the Human Development Index (HDI), the Multidimensional Poverty Index (MPI), and the Gini coefficient. These tools help to capture different dimensions of well-being and provide a more comprehensive picture of a household's overall welfare (UNDP, 2021).

There has been a shift towards more inclusive, competitive, and varied financial services in many nations, leading to greater accessibility and affordability for individuals regardless of their income or net worth Feyen et al. (2021). However, in the past, low-income households were not adequately served by banks and other financial institutions due to risk perceptions, a lack of credit data, and cost profiles (Alexander, 2017). Consequently, a significant portion of working-age individuals lacked access to financial services, as reported by Mutegi and Phelister (2013).

The Global Findex program revealed that approximately 48% of households surveyed worldwide did not have a formal account with a bank or financial institution, with developing nations experiencing this problem more acutely (Demirguc-Kunt et al., 2015).

Despite recent evidence of greater access to finance, fewer people in developing nations are using formal financial services (Lee et al., 2015). This lack of access to financial services is hindering progress and slowing down economic growth in these nations, as reported by Levine et al. (2019).

In Africa, the first phase of financial technology development involved the creation of mobile money, which has evolved to include individual resource management, personal and commercial insurance, and improved household financial service accessibility (Muthegi & Musau, 2021). Kenya has emerged as a leader in financial technology, thanks to the growth of mobile money networks such as M-pesa, agency banking, and online transaction services (Mbiti & Weil, 2011). As a result, access to financial services in Kenya has improved, with exclusion decreasing by 30.3% since 2006 (FinAccess, 2019). The use of mobile technologies for business transactions is increasing among Africans, and in Kenya, mobile platforms such as Airtel Money, MPesa, Equitel, Pesa Point, and Kenswitch dominate the market.

Household welfare in Kenya is a significant concern, given the country's socio-economic challenges (KNBS, 2020). Kenya is characterized by high levels of poverty, income inequality, and limited access to basic services in certain regions. However, the government and various stakeholders have implemented policies and programs to improve household welfare and alleviate poverty. In terms of measuring household welfare in Kenya, indicators such as income, consumption, education, health, housing, and access to basic services are commonly used (Government of Kenya, 2018).

Greenpark is a master-planned gated community near Athi River, 30 kilometers from Nairobi's CBD, with over 500 completed and inhabited residences. There are two schools on the estate, as well as a hotel with conference facilities, a restaurant and bar, a swimming pool, a gym, wedding grounds, and a football field, a retail strip mall, and a retirement community. Greenpark Estate has been named the greatest gated community in East Africa by Superior Homes Kenya (Superior Homes Kenya, 2023). The study was conducted within the urban and suburban areas of Green Park Estate in Nairobi County, Kenya. The primary

unit of analysis for this research was individual households residing in Green Park Estate. These households represent a diverse cross-section of the population, encompassing various income levels, family structures, and demographic characteristics.

The growth of digital financial services has facilitated more affordable and secure means of financial transactions for household welfare (Babcock, 2015). In Kenya, digitization of payments and borrowing has led to increased account ownership (Demirgüç-Kunt et al., 2017). However, the current financial infrastructure supporting access to financial services in developing countries is underdeveloped, inefficient, and provides individuals with limited options. This is in contrast to developed countries, where there is widespread availability of debit and credit cards, savings accounts, internet banking services, well-established payment systems, and other advanced financial service infrastructure (Demirguc-Kunt et al., 2016).

According to Demirguc-Kunt et al. (2015), more than 55.2% of Kenya's adult population has access to formal accounts in financial institutions, while 43.8% do not have accounts, with the majority residing in rural areas. However, the proportion of those who actively utilize these services may be lower, although data on voluntary exclusion is unavailable. Financially excluded individuals face constraints in accessing financial services such as credit and savings, which limits their participation in economic growth and development, and hinders their ability to contribute to poverty reduction and welfare improvement. Therefore, this study aims to determine the impact of financial technology access and household welfare in Green Park Estate, Nairobi County, Kenya.

The specific objective of the study was to determine the effect of access to electronic payment systems on household's welfare at Green Park Estate in Nairobi County. The research question was to what extent does access to electronic payment systems affect household's welfare at Green Park Estate in Nairobi County?

LITERATURE REVIEW

Theoretical Literature Review

Social Capital Theory

The Social Capital Theory, created by Pierre Bourdieu and revised by James Coleman, is extremely important to understanding the interactions between financial technology access and household wellbeing in Green Park Estate, Nairobi County, Kenya. Bourdieu (1986) defined social capital as the resources contained within social networks, such as trust, common standards, and interpersonal connections. Coleman (1988) expanded on this notion by stating that social capital is a useful resource for people and organizations, impacting their capacity to attain common goals and improve their overall well-being.

The Social Capital Theory can give significant insights in the context of the study's specific purpose of determining the influence of access to electronic payment systems on household wellbeing. According to the idea, social networks and connections can enhance knowledge distribution and the establishment of trust, both of which are required for the acceptance of new technologies (Portes, 1998). In this situation, families with greater social relationships within Green Park Estate may be more inclined to accept and profit from electronic payment systems due to shared knowledge and trust within their networks.

The Social Capital Theory emphasizes the impact of social relationships in obtaining financial resources in order to achieve the goal of concentrating on the influence of access to financial savings innovation on household wellbeing. Lin (2001) studies stress that social networks may give access to financial information and possibilities, allowing individuals to make educated financial savings decisions. Households with strong social networks may have an advantage in accessing and implementing new savings tools in the context of Green Park Estate, adding to their overall well-being.

The emphasis on trust and social norms in the Social Capital Theory becomes relevant when examining the influence of mobile banking services on family welfare. According to Putnam (2000), strong social networks foster an atmosphere of reciprocity and collaboration, which is critical for the effective adoption of mobile banking systems. As a result, Green Park Estate families immersed in trusting networks may benefit from improved wellbeing through efficient usage of mobile banking services.

The Social Capital Theory emphasizes the relevance of social relationships in borrowing behavior in relation to the purpose centered on the influence of digital borrowing on family welfare. Granovetter's (1973) study on "The Strength of Weak Ties" argues that individuals with diversified social ties, even if they are weak, can have access to many sorts of knowledge and resources. Households with diverse social ties may be more likely to engage in digital borrowing in the setting of Green Park Estate, thus altering their overall wellbeing.

Empirical Literature Review

Simatele, (2020) conducted research on the impact of e-payment methods on welfare. According to the research, e-payments are critical for increasing financial inclusion and attaining global development goals such as the United Nations Sustainable Development Goals (SDGs). E-payments can lower prices, reduce the likelihood of loss and risk for low-income customers, and improve access to formal financial services, all of which can improve welfare. This study focuses on Zimbabwe and aims to investigate the circumstances in which e-payments can improve welfare by analyzing qualitative data from focus groups. The findings indicate that excessive costs, system failures at the point of sale, drawn-out refund procedures, and restricted adoption are the main problems that households face with payment methods. Participants prefer paying in foreign currency with cash due to high levels of market concentration in mobile money, lack of transparency by financial service providers, and retailers' preference for cash. The study suggests that the government should address both the market's lack of competition and macroeconomic liquidity limits.

In another study, Oyeyinka, Adebisi, and Adekunle, (2020) investigated the factors that influence electronic payment adoption, their impact on consumer decision-making, and the increase of consumer spending in Nigeria. The study used primary and secondary data and was conducted in Lagos state, Nigeria, using a cross-sectional survey of bank customers who have used e-payment systems. The questionnaire was developed and verified using the Likert scale and was pilot-tested with 50 copies. The Cronbach alpha reliability test was used to assess the questionnaire's dependability, and all six variables were found to be reliable, with Cronbach alpha values falling between 0.725 and 0.828, which is within the

acceptable range. Cochran formulas were used to determine the sample size for the investigation, which was 384. A total of 420 respondents were chosen from five divisions (locations) of Lagos using the multistage sampling technique, and they were given the data collection tool. Descriptive statistics such as frequency, percentage, and inferential statistics were used to analyze the data, including analysis of variance, Pearson correlation, and hierarchical regression.

Oyeyinka, Adebisi, and Adekunle, (2020) discovered a strong positive relationship between electronic payments' acceptance in Nigeria and the factors that influence them (convenience, security and safety, trust, and social influence). The study's findings indicate that over 50% (3/5) of the factors that impact the adoption of e-payment in Nigeria are associated with personal characteristics. The research showed that various factors, including education level, financial inclusion, income, internet accessibility, and the availability of financial infrastructure such as point-of-sale machines and mobile banking services, affect the adoption of electronic payments in Nigeria. Additionally, the study found that electronic payments have a positive influence on consumer purchasing behavior, leading to an increase in consumer spending growth in Nigeria. As a policy recommendation, the Nigerian government can use electronic payments to promote consumer spending, stimulate aggregate demand, attract foreign investment, and boost the country's economy.

In a study conducted by Chunkai et al., (2022) to determine how mobile payments affect residents' happiness in China, the use of ordered probit regression with endogenous treatment was employed to investigate the impact of mobile payments on residents' satisfaction while considering potential endogeneity. The study revealed that using mobile payments is associated with increased levels of happiness among residents. Numerous robustness tests were conducted, including the use of an alternative instrumental variable (IV), changing the explanatory variable, and eliminating some outlier observations, and they supported the conclusion. The study also explored different perspectives on how mobile payments affect citizens' satisfaction, revealing several positive mechanisms, including increasing social interaction, promoting entrepreneurship, reducing transaction

costs, and enhancing the quality of life. Despite being less common than cash transactions, mobile payments have the potential to encourage excessive spending, which can be detrimental to a community's well-being.

In a recent study by Chinese researchers Chunkai et al., (2022), it was found that mobile payments have inclusive features that positively affect happiness in socially disadvantaged groups, such as the elderly, rural residents, the undereducated, and low-income households. These findings contribute to the body of knowledge on financial inclusion and online contentment, and highlight the importance of actively promoting mobile payments to aid vulnerable groups and prevent potential overconsumption consequences.

Summary of Research Gaps

Variable	Researchers and Year	Title of the Study	Findings	Research Gap	How Current Study Addresses Gaps
Electronic Payment Systems	Simatele (2020)	M. Zimbabwe's experience with payment instruments and welfare.	Excessive costs, system failures, e-drawn-out refund procedures, and adoption restrictions are common payment method issues among households.	This study focused only on e-payment instruments, and limiting its generalizability to other payment methods.	This study examines a broader range of its payment and their impact on household welfare within Green Park Estate.
Electronic Payment Systems	Oyeyinka, O., Adebisi, O., and Adekunle B. (2020)	Electronic payment use in Nigeria: empirical data. Lagos University	Adoption of e-payments influenced education in financial inclusion, internet accessibility, and financial	This study is focused on consumer spending level, rather household welfare.	In the context of Green Park Estate, the current study precisely explores the link between e-

Variable	Researchers and Year	Title of the Study	Findings	Research Gap	How Current Study Addresses Gaps
			infrastructures such as point-of-sale machines and mobile banking services.		payment access and household well-being.

CONCEPTUAL FRAMEWORK

The purpose of the conceptual framework is to elucidate the research problem under investigation by exploring the correlation between the dependent and independent variables. This study will adopt the ensuing conceptual framework:

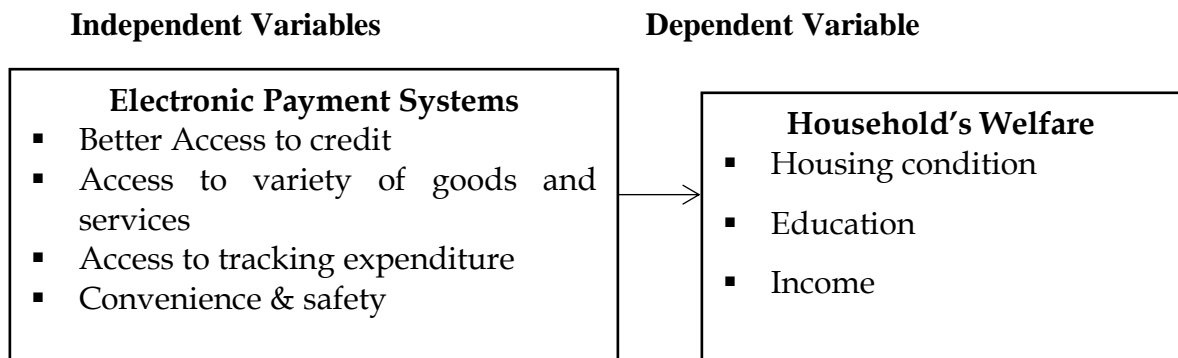


Figure 1: Conceptual Framework

RESEARCH DESIGN AND METHODOLOGY

The study adopted descriptive research design. The goal of descriptive research is to correctly and thoroughly characterize a population, situation, or phenomena. It can answer the questions what, where, when, and how, but not why (McCombes, 2019). The study chose to adopt a descriptive research design, which describes the state of affairs in an organization without manipulating variables.

The target population was households in green park estate and apartment complexes located in Nairobi County. Based on Superior Homes Kenya, (2023), Green park is a master-planned gated community with over 500 completed and occupied homes in Athi River, 30 km from the Nairobi CBD. The reason for choosing green park estate is that the estate has two schools, a hotel with conference facilities, a restaurant and bar, a swimming pool, a gym, wedding grounds, and a football turf, a retail strip mall, and a retirement village making it the best gated community in East Africa. It is possible that the researcher conducting the study is already familiar with the geography, infrastructure, culture, and socio-economic conditions of this specific location. This familiarity can be advantageous for the research as it enables the researcher to easily access and navigate the area, and to establish contacts with the community members.

The effectiveness of a research study depends on the selection of a suitable sample, which is critical to the study's success. Sampling involves choosing a group of individuals from a population to obtain representative results. Turner (2003) defines the sampling frame as the set of sources used to select the sample. Kombo and Tromp (2009) proposed that selecting 10% to 20% of the target population using stratified sampling is sufficient to make inferences about the study's findings. In this research, the Cochran formula, which was developed in 1977 to estimate a representative sample proportion, was employed.

500

$1 + (500-1)$

227

$n_0 =$ Sample size,

$N =$ Target population (227)

($1 - \alpha$ equals the desired confidence level of 95%) $1, q$ is $1-p$.

$n_1 = 499$

$e =$ level of precision $\pm 5\%$

05 (error of 5%) = $n_0 = (t)^2 * (p) (q) / (d)^2 = 499$

= **157**

The study sample size were therefore 157 households in Greenpark Estate, Nairobi County. Simple random sampling technique was used to select a sample 157 respondents. A simple random sample is a subset of a population chosen at random. Each member of the population has an identically equal probability of getting chosen using this sampling approach (Thomas, 2020).

To gather data, multiple tools are utilized. Data collection tools aid in providing relevant information to address the research question. Tools such as observations, questionnaires, and interviews are common data collection methods. In this study, questionnaires were the primary data collection tool. Participants were required to complete a questionnaire to provide self-report data. Closed-ended questionnaires were preferred in this study since they were more reliable in measuring and addressing the research objectives and questions.

Pilot study was conducted to collect feedback on the questionnaire before distributing it to participants. This helped to determine whether the questionnaire adequately addressed the required data for the study, and whether it was easy to comprehend for respondents. A total of 12 houses were used for the pilot study, as recommended by Kothari (2009), which suggests that the pilot study should only include 10% of the total sample size.

To ensure validity in this research, a pilot study was conducted to verify the study questionnaire. The study's supervisor also played a role in ensuring the validity of the study. They reviewed the questionnaire and helped rephrase any incorrect questions that did not accurately measure the study's intended objective. This was done to ensure that the questionnaire's content aligned with the study's goal. Before distributing the actual questionnaire, it is essential to identify and correct any issues with it. Content validity was used to guide the researcher in terms of representativeness and sample adequacy.

In this research, the researcher assessed the instrument's reliability by calculating its Cronbach alpha score before using it to collect the main data. Cooper and Schindler (2013) explain that the Cronbach alpha score is a measure of instrument reliability that ranges from

0 to 1, with scores between 0 and 0.6 indicating poor reliability, while scores of 0.7 and higher indicate good internal consistency and reliability.

The data collection process was carefully planned and executed to ensure accuracy, reliability, and validity of the data. In the present study, the researcher obtained permission from the relevant authorities and used questionnaires to collect data from households in Green Park Estate, Nairobi County. The questionnaires were hand-delivered to the households, and the respondents were assisted in completing them.

Descriptive statistics, including mean, standard deviation, and percentages, were utilized to analyze both qualitative and quantitative data. The results of the data analysis were then presented in tables, graphs, and charts to make it easy to comprehend the findings.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where,

Y: the dependent variable (the wellbeing of the household) expressed as a linear combination of the independent variables X₁, X₂, and X₃.

β_0 : The regression constant i.e. $Y = \beta_0$ when $X_1, X_2, X_3, \dots, X_k = 0$

β_1 : Electronic Payment Systems (independent variable)

β_2 : Financial Savings Innovation (independent variable)

β_3 : Mobile Banking services (independent variable)

e: Error term

The study utilized linear regression analysis to determine the coefficients of a linear equation and to identify the independent variables that accurately predict the dependent variable. To assess the significance of the data, the study conducted a test of significance on the multiple variables, utilizing several statistical tools such as the coefficient of determination (R squared), correlation coefficient (R), F-test, and ANOVA table. A correlation analysis was also performed in the study to identify the link between the dependent and independent variables. The study adhered to the research ethical.

RESEARCH FINDINGS

Access to Electronic Payment Systems and Household's welfare

The study sought to determine effect of access to electronic payment systems on household's welfare.

Effect of Access to Electronic Payment Systems on Household's welfare

Statements	Mean	Std. Dev
Households are in a better position to access credit	4.27	0.73
Households have a wider variety to goods and services by using electronic payments	4.26	0.81
Households are able to track and account for spending habits by using electronic payment	4.21	0.66
Households are able to pay for goods and services safely and conveniently	4.02	0.74

Source: Research data, (2023)

Respondents largely agree that electronic payment methods have a good impact. Notably, respondents strongly believe that electronic payment methods improve access to credit and extend the range of accessible goods and services. Furthermore, respondents regard these systems as efficient instruments for tracking spending patterns and assuring safe, convenient payments for products and services. The mean values for each statement range from 4.02 to 4.27, indicating overall positive attitudes. The standard deviations accompanying the mean values indicate varied degrees of agreement among respondents. This report highlights the important significance of electronic payment systems in boosting consumer financial capability and convenience.

These findings are consistent with previous research that has found that access to electronic payment systems has a positive impact on household welfare. For example, a study by Zhu et al. (2017) found that households in rural China who had access to electronic payment systems were more likely to have access to credit and were better able to manage their finances. Another study by Rambe and Rambe (2019) found that electronic payment

systems have contributed to financial inclusion and have improved the welfare of households in Indonesia.

However, it is important to note that access to electronic payment systems is not universal and there are still many households that do not have access to these systems. According to a report by the World Bank (2021), only 31% of adults in low-income countries have access to a bank account, which is often a prerequisite for using electronic payment systems. Therefore, efforts should be made to increase access to electronic payment systems, particularly in low-income countries, in order to improve household welfare. The findings match with Oyeyinka, Adebisi, and Adekunle, (2020) which revealed that various factors, including education level, financial inclusion, income, internet accessibility, and the availability of financial infrastructure such as point-of-sale machines and mobile banking services, affect the adoption of electronic payments in Nigeria.

Multiple Regression Analysis

A multiple regression analysis was conducted in this study to test the relationship between predictor variables. The statistical software package used for coding, entering, and computing the measurements of the multiple regressions was the Statistical Package for the Social Sciences (SPSS V 25.0).

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.793 ^a	.629	.602	.16720

Source: Research data, (2023)

In order to evaluate the model fit, the study employed the coefficient of determination. The adjusted R², also known as the coefficient of multiple determination, indicates the percentage of the dependent variable variance that is uniquely or jointly explained by the independent variables. The study revealed that the model had an adjusted coefficient of determination (R²) of 0.602, indicating that 60.2% of the variation in access to household welfare is explained by the independent variables examined, which include access to electronic payment systems, financial savings innovation, mobile banking services, and

digital borrowing. The significance of the model was tested using ANOVA technique, and the outcomes are reported in Table 11.

Summary of One-Way ANOVA results

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	30.320	4	7.58	21.127	.000 ^b
1 Residual	41.496	117	0.355		
Total	71.816	121			

Source: Research data, (2023)

The study's goals center on determining how household wellbeing in Kenya's Nairobi County's Green Park Estate relates to access to financial technology. The outcomes of a statistical analysis carried out in the context of the study are summarized in the supplied ANOVA table.

The degree to which the household welfare dependent variable's variance is explained by the regression model is shown by the "Regression" component's Sum of Squares (30.320), Degrees of Freedom (Df), and Mean Square. The significant F-value (21.127) for the "Regression" in relation to the Mean Square denotes the model's strong explanatory power. Further evidence that the model's influence is statistically significant comes from the extremely low p-value (0.000b).

The regression model does not account for the unexplained variance in household welfare represented by the "Residual" component's Sum of Squares (41.496). The total of the "Regression" and "Residual" components, or the "Total" total of Squares (71.816), represents the overall variance in family welfare.

The ANOVA results indicate that household welfare in Green Park Estate is significantly impacted by the financial technology access variables under investigation, including electronic payment systems, financial savings innovation, mobile banking services, and digital borrowing.

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.059	.110		9.605	.000
1 Access to Electronic Payment Systems	.428	.044	.244	9.713	.000
Financial savings innovation	.362	.040	.233	9.007	.000
Mobile banking services	.604	.045	.355	13.312	.000
Digital Borrowing	.757	.045	.428	16.794	.000

Source: Research data, (2023)

As per the SPSS generated output as presented in table above, the equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$) becomes:

$$Y = 1.059 + 0.428X_1 + 0.362X_2 + 0.604X_3 + 0.757X_4$$

The results from a regression analysis are shown in Table 12 with the goal of testing hypotheses about the influence of different financial technology access determinants on family welfare in the setting of Green Park Estate, Nairobi County, Kenya. The coefficient estimate and accompanying statistical values for each row in the table correspond to a particular variable.

When all independent variables are set to zero, the estimated value of the dependent variable (household welfare) is represented by the "Constant" coefficient of 1.059. The unstandardized coefficients (B) and their standard errors are shown in the rows below for each of the independent variables: "Access to Electronic Payment Systems," "Financial Savings Innovation," "Mobile Banking Services," and "Digital Borrowing."

The standardized coefficients (Beta) represent the relative relevance of each independent variable in explaining variance in the dependent variable when their scales are taken into account. The standardized coefficients were calculated using each variable's standard deviation. The "T" values are the proportions of the unstandardized coefficients to their

standard errors. These numbers are used to test the hypothesis that the coefficients deviate from zero in a meaningful way.

The corresponding p-values (Sig.) are all extremely low (around zero), suggesting great statistical significance. This implies that access to electronic payment systems, financial savings innovation, mobile banking services, and digital borrowing all have a large and favorable influence on household wellbeing. The findings of this regression study lend empirical support to the premise that increasing access to financial technology services leads to enhanced household wellbeing in Green Park Estate, Nairobi County, Kenya. These findings reflect Ayodele's (2011) conclusions that access to electronic payment systems is an important component in achieving family wellbeing. The statistical analysis was carried out at a 5% level of significance. According to the model, all predictor variables were significant since their probability values were less than the alpha value of 0.05.

CONCLUSION AND RECOMMENDATIONS

The study's findings indicate that access to electronic payment systems has a positive impact on household welfare. The study's results show that households have a better chance of accessing credit, a wider variety of goods and services, and the ability to track and account for their spending habits. Additionally, households can safely and conveniently pay for goods and services through electronic payment systems. The study's findings are consistent with prior research that demonstrates that technology has a positive impact when effectively utilized by households.

Based on the study's findings, it is suggested that financial institutions and politicians make electronic payment systems a key component of their strategic agenda. Financial institutions may considerably improve financial inclusion and accessibility for families by emphasizing the development and broad adoption of electronic payment platforms such as mobile banking and digital borrowing services. In the meanwhile, governments should develop and argue for policies that encourage the expansion and use of these systems, allowing households to fully realize their advantages. Furthermore, thorough awareness campaigns and educational programs must be launched. These programs can stimulate

improved acceptance and competent usage of electronic payment systems by improving families' comprehension of their benefits, hence improving total household welfare.

Based on the findings of this study, several areas for further research can be identified. One suggestion is to explore the impact of other financial technology innovations, such as blockchain and cryptocurrency, on household welfare. Another possible avenue for further investigation is to examine the role of government policies and regulations in promoting access to electronic payment systems and other financial technology innovations. Additionally, future studies could focus on specific demographic groups, such as rural households or low-income households, to better understand the impact of financial technology on their welfare.

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