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IMPACT OF ACCEPTANCE RATE OF MOBILE PHONE CREDIT AND SAVING SERVICES ON THE PERFORMANCE OF MICRO AND SMALL ENTERPRISES

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Abstract
Businesses all over the world are getting more and more interested and involved in strategic management with integration of the corporate strategy in functional decision- making hence the competitiveness, and profitability of the firm. The general objective of the study was to determine the impact of acceptance rate of mobile phone credit and saving services on the performance of micro and small enterprises in Kisii Town, Kenya. A cross sectional survey research design aimed at identifying MSE owners' perception on the acceptance rate of mobile phone credit and saving services on the performance of micro and small enterprises was used. Stratified sampling was used to identify the MSEs and simple random sampling techniques used to select the respondents and questionnaires placed to collect the data. A questionnaire was used to collect data and a split-half method of estimating reliability used with the aim of assessing the reliability and validity of the research instrument through the expert advice of the supervisors and faculty. The study sample comprised four hundred (400) owners of MSEs out of a population of three thousand five hundred and twenty eight (3528). Once the data has been collected, quantitative data was analyzed using descriptive statistics such as mean. Multiple regression analysis was employed to test the hypotheses. The study showed among other findings, that there is an impact on acceptance rate of mobile phone credit and saving services on the performance of micro and small enterprises. On the basis of the regression results, the study concludes that although the micro and small-scale enterprises operating in Kakamega County, Kenya have invested in mobile phone credit facilities, they have not significantly contributed towards their performance. Also, it was found that the acceptance of the mobile phone saving facilities has significantly contributed towards performance of the micro and small-scale enterprises. It was therefore recommended among others that the owners and senior managers of the micro and small-scale enterprises in Kakamega County should invest more resources in enhancing the mobile phone saving facilities so as to significantly drive performance of their firms.
Keywords: mobile phone, credit services, saving services, micro and small enterprises

Introduction

Businesses all over the world are getting more interested and involved in strategic management. This has consequences in the way businessmen allocate resources within the

firm. This influences the competitive advantage of the organization and hence the competitiveness and profitability of the firm (Chaffey, 2017). Competitive advantage is defined when a firm is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors. In order to sustain this advantage over competitors, efforts to replicate that advantage have to be ceased (Duncombe & Heeks, 2011). Competitive advantage can only be obtained when the resource adds positive value to the firm, the resource should be unique or rare, and the resource should be imperfectly imitable and cannot be substituted with another resource (Duncombe and Boateng, 2019).

Traditionally, Information and Communication Technology (ICT) served as competitive advantage and annually organizations spend a high amount of moneyin acquiring, managing and maintaining this resource (Boateng, 2019). The Kenyan Government recognizes the contribution of the small enterprises to the Kenyan economy. It has come up with the department of micro and smallenterprise development in the ministry of trade and industry. The department is aresult of the merger of the division of small scale & Jua Kali (i.e. hot sun in Kiswahili language) enterprises and the directorate of applied technology. This department is responsible for the formulation and implementation of policies andstrategies for the development of the MSE sector. Although huge amounts of money have been spent on MSEs through projects and programs in recent years, their impact on survival and development of the enterprises has been low, as theirmortality rate remained high.

Though mobile phones were once viewed as a luxury item, their recent rise and worldwide penetration has been remarkable (Salzaman et al, 2011). In1999, only 8 percent of the world population had mobile phone subscriptions. By 2007, 49 percent were mobile phone subscribers. Today more than 89 percent ofthe world's population is within mobile coverage (Huselid et al, 2019). We can attribute the rapid adoption of mobile phone technology in developing countries toa combination of low infrastructure costs, the rise of pre-paid service, the decreasein handset prices, and the privatization of mobile phone service (ITU, 2010).

In Kenya there has been a rapidly increasing trend in mobile phone subscription by the rural and urban populations. For instance the number of mobile subscribersin Kenya has risen to 8 million subscribers from 6.5 million subscribers in June 2006, from the country's two operators (Safaricom and Airtel) against 293,400 fixed lines This increased accessibility to mobile phones has introduced changes in most sectors of the economy and particularly the urban informal sector with Micro and Small Enterprises (MSEs) changing their business and operation environment, thereby creating an impact on Kenya's fastest growing sector and employer (Government of Kenya, 2012).

Mobile Phone Technologies have the potential to improve the economic performance of MSE's by affecting almost every structural characteristic of these organizations. With the adoption of this new technological dynamo, its usage is expected to have gained

prominence by virtually all MSE's in Kenya. This increased accessibility has introduced changes in most sectors of the economy andparticularly MSEs thereby creating an impact on Kenya's fastest growing sector and employer. Is there an impact of adoption and use of mobile phone technologyamong MSE's in Kisii Town? The Research problem therefore was to assess the impact of adoption and use of mobile phone technology on the performance of micro and small enterprises in Kisii Town, Kenya.

Research Questions

1. What is the acceptance rate of mobile phone credit services by micro and small-scale enterprises in Kakamega County, Kenya?

2. What is the acceptance rate of mobile phone saving services by micro and small-scale enterprises in Kakamega County, Kenya?

Research Hypotheses

1. Mobile phone credit services have no effect on performance of micro and small-scale enterprises in Kakamega County, Kenya.

2. Mobile phones saving services have no effect on performance of micro and small-scale enterprises in Kakamega County, Kenya.

Research Method

The study employed a cross sectional survey research design aimed at impact of acceptance rate of mobile phone credit and saving services on the performance of micro and small enterprises in Kisii Town, Kenya whereby the researcher studied perceptions and responses as held by the respondents. The study was carried out among MSEs found in Kisii Town. The study population consisted of 3528 owner-managers of MSEs within Kisii Town. Yamane (1967) provided a simplified formula to calculate sample sizes when thepopulation under study is less than ten thousand. This formula was used to calculate the sample size of 400 respondents. Both stratified and simple random sampling techniques were used for the study. Stratified sampling ensured that the sub-groups of MSEs were proportionally represented and that the difference in the sub-group characteristics was accounted for. This technique was used to ensure that the target population is divided into different homogenous strata and each stratum is represented in the sample in a proportion equivalent to its size in the population. The study used a structured questionnaire to collect primary quantitative data from the owners of each of the selected MSEs. The questionnaire was developed to capture information on impact of acceptance of mobile phone credit and saving services on the performance of MSEs. Pilot testing was conducted to detect if there are weaknesses in

design and instrumentation and to provide proxy data for selection of an appropriate sampling design. Cronbach alpha was the basic formula used for determining the reliability which yielded reliability co-efficient of 0.787. Data collected was analysed using mean and standard deviation for the research questions and multiple regression for the hypotheses.

Results

What is the acceptance rate of mobile phone credit services by micro and small-scale enterprises in Kakamega County, Kenya?

The results of descriptive statistics in terms of means and standard deviations on mobile phone credit services are shown in Table 1

Table 1: Descriptive statistics of the acceptance of Mobile Phone Credit Services

Statement	Mean	Std. Dev
Mobile phone credit services provide financial help to small traders through credit	3.72	0.725
Mobile phone credit services ensure that outstanding loans are repaid on time	3.70	0.816
Mobile phone credit services support saving through credit deposits	4.00	0.729
Mobile phone credit services have set-up an innovation-friendly mechanism that regulates credit services in the county	3.83	0.839
Mobile phone credit services support money transfer services in determining how funds are transferred between banks or accounts	3.81	0.685
Average	**3.81**	**0.759**

The results in Table 1 indicate that respondents agreed that mobile phone credit services supported saving through credit deposits (M=4.00, SD= 0.729). Respondents agreed that mobile phone credit services had set-up an innovation-friendly mechanism that regulates creditservices in the county (M=3.83, SD= 0.839). Respondents agreed that mobile phone credit services supported money transfer services in determining how funds are transferred between banks or accounts (M=3.81, SD= 0.685). Respondents further agreed that mobile phone credit services provided financial help to small traders through credit (M=3.72, SD= 0.725). The participants also agreed that mobile phone credit services ensured that outstanding loans are repaid on time (M=3.70, SD= 0.816). The overall implications of the findings in Table 4.4 arethat mobile phone credit services (M=3.81, SD= 0.759) had were widely utilized by the studied firms.

What is the acceptance rate of mobile phone saving services by micro and small-scale enterprises in Kakamega County, Kenya?

Table 2: Descriptive statistics of the acceptance of mobile phone savings services

Statement	Mean	Std. Dev
Mobile phone saving services provide opportunities for online investment	3.75	0.768
Mobile phone saving services assist in ensuring financial security of small traders is well protected	3.76	0.985
Mobile phone saving services are accessible to all small-scale traders	3.74	0.881
Mobile phone saving services encourage small traders to save some money for the future	3.89	0.894
Mobile phone saving services support small traders by creating job opportunities that sustain their living standards	3.79	0.752
Mobile phone saving services enable small traders to access additional funding for their farming activities	3.32	0.844
Mobile phone saving services have improved the wellbeing of small traders in Kakamega County	3.95	0.800
Mobile phone saving services have improved financial security levels among small traders in Kakamega County	4.07	0.828
Mobile phone saving services have the ability of small traders to access more information on their farming practices	4.06	0.686
Average	**3.81**	**0.826**

From the findings, it was noted that respondents agreed that mobile phone saving services had improved financial security levels among small traders in Kakamega County (M=4.07, SD= 0.828). Respondents agreed that mobile phone saving services had the ability of small traders to access more information on their farming practices (M=4.06, SD= 0.686). The participants agreed that mobile phone saving services had improved the wellbeing of small traders in Kakamega County (M=3.95, SD= 0.800). Respondents agreed that mobile phone saving services encouraged small traders to save some money for the future (M=3.89, SD= 0.894). The respondents of the study further agreed that mobile phone saving services supported smalltraders by creating job opportunities that sustain their living standards (M=3.79, SD= 0.752). Respondents agreed that mobile phone saving services assisted in ensuring financial security of small traders is well protected (M=3.76, SD= 0.985). It was shown that mobile phone saving

services provided opportunities for online investment (M=3.75, SD= 0.768). Respondents agreed that mobile phone saving services were accessible to all small-scale traders (M=3.74, SD= 0.881). However, respondents moderately agreed on whether mobile phone saving services enabled small traders to access additional funding for their farming activities (M=3.32, SD= 0.844). On overall, the study noted that mobile phone saving services (M=3.81, SD=0.826) had been embraced by the studied firms.

The values of the regression beta coefficients with the p-values were computed and summarized as shown in Table 3.

Table 3: Regression analysis of the effect of mobile phone credit and saving facilities

	Unstandardized Coefficients		**Standardized Coefficients**		
	B	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	4.652	1.084		4.291	0.000
Mobile Phone Credit Facilities	0.000	0.040	0.000	0.010	0.992
Mobile Phone Saving Facilities	0.154	0.031	0.226	4.955	0.000

From Table 3, the following equation is predicted between mobile phone technology and performance of the SMEs:

$Y = 4.652+.000X_1+.154X_2$

Where:

Y = Performance

X_1 = Mobile Phone Credit Facilities

X_2 = Mobile Phone Saving Facilities

The first hypothesis of the study was H_{01}mobile phone credit facilities have no effect on performance of micro and small-scale enterprises in Kakamega County, Kenya. From the results, mobile phone credit facilities had p-value as 0.992, which is above 0.05. Thus, the study failed to reject hypothesis H_{01} and inferred that mobile phone credit facilities have no significant effect on performance of micro and small-scale enterprises in Kakamega County, Kenya.

The second hypothesis was as follows; H_{02}mobile phone saving facilities has no effect on performance of micro and small-scale enterprises in Kakamega County, Kenya. Based on the findings, the p-value of mobile phone saving facilities was 0.000, which is less than 0.05. Thus,the study rejects hypothesis H_{02} and infers that mobile phone saving facilities have significanteffect on performance of micro and small-scale enterprises.

Discussion

The overall implications of the findings are that mobile phone credit services (M=3.81, SD= 0.759) had were widely utilized by the studied firms. The results indicate that respondents agreed that mobile phone credit services supported savings through credit deposits (M=4.00, SD= 0.729). Respondents agreed that mobile phone credit services had set-up an innovation- friendly mechanism that regulates credit services in the county (M=3.83, SD= 0.839). Respondents agreed that mobile phone credit services supported money transfer services in determining how funds are transferred between banks or accounts (M=3.81, SD= 0.685). Respondents further agreed that mobile phone credit services provided financial help to small traders through credit (M=3.72, SD= 0.725). The participants also agreed that mobile phone credit services ensured that outstanding loans are repaid on time (M=3.70, SD= 0.816). These findings are empirically supported by Blechman (2016) who did a study on mobile credit by comparing the Kenyan and Tanzanian situation in terms of regulatory challenges, consumer protection and credit reporting based on customer transaction information. There was an increase in mobile financial service provision especially in the developing countries, the rural and low-income populations. The first hypothesis of the study was H_{01}mobile phone credit facilities have no effect on performance of micro and small-scale enterprises in Kakamega County, Kenya. From the results, mobile phone credit facilities had p-value as 0.992, which is above 0.05. Thus, the study failed to reject hypothesis H_{01} and inferred that mobile phone credit facilities have no significant effect on performance of micro and small-scale enterprises in Kakamega County, Kenya. The result contradicts Kinyanzui (2018) who conducted a study on the effects that mobile credit has on performance of commercial banks in Kenya and found out that mobile credit enhanced overall performance, operational efficiency, customer satisfaction and organization efficiency, while government policies led to growth of mobile credit in the country.

On overall, the study noted that mobile phone saving services (M=3.81, SD=0.826) had been embraced by the studied firms. It was noted that respondents agreed that mobile phone saving services had improved financial security levels among small traders in Kakamega County (M=4.07, SD= 0.828). Respondents agreed that mobile phone saving services had the ability of small traders to access more information on their farming practices (M=4.06, SD=0.686). The participants agreed that mobile phone saving services had improved the wellbeing of smalltraders in Kakamega County (M=3.95, SD= 0.800). Respondents agreed that mobile phone saving services encouraged small traders to save some money for the future (M=3.89, SD= 0.894). The

respondents of the study further agreed that mobile phone saving services supported small traders by creating job opportunities that sustain their living standards (M=3.79, SD= 0.752). Respondents agreed that mobile phone saving services assisted in ensuring financial security of small traders is well protected (M=3.76, SD= 0.985). It was shown that mobile phone saving services provided opportunities for online investment (M=3.75, SD= 0.768). Respondents agreed that mobile phone saving services were accessible to all small-scale traders (M=3.74, SD= 0.881). However, respondents moderately agreed on whether mobile phone saving services enabled small traders to access additional funding for their farming activities (M=3.32, SD= 0.844). Ouma, Odongo and Were (2017) shared that mobile phone technology also impacts on the amount saved as based on frequency and convenience that allow many individuals to transact at any moment and that more savings can be realized through adoption of mobile phone technology which allows more transactions and ensures security and safety of the saved monies. The second hypothesis was as follows; H02 mobile phone saving facilities has no effect on performance of micro and small-scale enterprises in Kakamega County, Kenya. Based on the findings, the p-value of mobile phone saving facilities was 0.000, which is less than 0.05. Thus, the study rejects hypothesis H02 and infers that mobile phone saving facilities have significant effect on performance of micro and small-scale enterprises. These findings contradict with Bastian et al. (2018) who conducted a study on the short-term impact for improvement in access to mobile savings whether the persons had business training or not and noted that there was no significant evidence that mobile savings translated to greater investment, sales and profits.

Conclusion and Recommendations

The first objective of the study sought to determine the acceptance rate of mobile phone credit and saving services on the performance of micro and small enterprises in Kakamega County, Kenya. Based on descriptive statistics, the study concludes that the micro and small-scale enterprises in Kakamega County, Kenya have embraced mobile phone credit facilities. On the basis of the regression results, the study concludes that although the micro and small-scale enterprises operating in Kakamega County, Kenya have invested in mobile phone credit facilities, they have not significantly contributed towards their performance.

The study sought to determine the acceptance rate of mobile phone credit and saving services on the performance of micro and small enterprises in Kakamega County, Kenya. In view of the descriptive statistics, the study concludes that mobile phone saving services have been embraced by the micro and small-scale enterprises in Kakamega County, Kenya. The study concludes that utilization of the mobile phone saving facilities has significantly contributed towards performance of the micro and small-scale enterprises in Kakamega County, Kenya. It was therefore recommended that the owners and senior managers of the micro and small-scale enterprises in Kakamega County should invest more resources in enhancing the mobile phone saving facilities so as to significantly drive performance of their firms. Also, the practitioners

who may include information and communication technology specialists should appreciate the role played by mobile phone saving facilities in driving performance of the firm.

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