

Effects of Digital Credit on Small Business Performance in Obunga, Railways Ward, Kisumu County, Kenya.

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ABSTRACT

Small and Micro Enterprises play an important role in economic development of any nation by harnessing human capital, use of raw materials and technology. They require enough funds to facilitate expansion of operations, develop new products, hire new staff and acquire new facilities. Lack of capital and financing conversely has been identified as a major factor affecting their performance leading to their failures. Innovations in financial technology in the form of digital credit have taken advantage of these financing gaps and have come up with powerful tools to mitigate financing barriers faced by small businesses. This study sought to address the effects of digital credit on small business performance in Obunga, Railways ward in Kisumu, Kenya. The business performance was determined through operating cash flow, Sales volume and Net profit margin. Asymmetric Information theory and Default Risk Theory of Credit were selected to anchor this study. The study adopted descriptive research design. The target population was 454 Small and Micro Enterprises while the sample size was 212 Small and Micro Enterprises. The study adopted both stratified and simple random sampling techniques. Primary data was collected using structured questionnaires and interviews. Secondary data was collected through reviewing available records regarding digital credit and small business performance. The study adopted content validity. The data collected was analyzed using the Statistical package for social sciences version 24.0. Data was analyzed using descriptive statistics. The study findings conclude that the performance of the SMEs could be seen from profit margins, sales when they access digital credit. The study in addition suggests that the fast growth of fintechs had increased the cost of borrowing to SMEs and their repayment problems even though they offer flexible loan contracts to SMEs who have the ability to determine their own preferred loan repayment schedule. The study recommends the managers and owners of SMEs in Obunga ward to adopt an entrepreneurial mind-set that would support their ability to better gain financial access from various financial institutions. Based on the study findings, it is also recommended that the government mobile loan institutions should consider lowering the costs involved in lending the credit. Lastly, the study recommends the managers and owners of SMEs in Obunga ward to make use of available flexible repayment options to borrow what their businesses actually require.

Key words: Small businesses, Digital credit, Finance, Business performance.

INTRODUCTION

Small and medium-sized enterprises (SMEs) have been a subject of great interest because they have been recognized as the main drivers of different economies in many countries. They account for the majority of

businesses worldwide and are important contributors to job creation and global economic development, (Muathe, 2010). However, these businesses cannot fulfill their full potential, since institutional and market failures, most importantly the constrained access to finance, disproportionately affect smaller firms. Owners and managers of SMEs rank access to finance as the most binding constraint to growing their business and cross-country analyses underline that smaller and younger firms are more likely to be excluded from external finance, (Wole 2009). Traditional lenders like the banks have also for a long time believed that loaning to small businesses is risky and unmaintainable. They consider persons who run this business as those who do not save or are just bad borrowers (Kimenyi & Ndungu, 2009).

The recent years however have seen innovation that have resulted in the rise of financial technology which takes advantage of the financing gaps and have come up with lending platforms that allow small businesses to apply for loans online, often without the need for collateral or a credit score, (World Bank Group 2020). As opposed to conventional loans it is instant, automated, and remote (Chen and Mazer 2016). Digitally delivered credit has quickly expanded in emerging markets. CGAP research in Africa, Asia, and Latin America counts 22 deployments with an estimated total of 24 million subscribers, and six deployments with a total of more than 1 million users. Africa however, is taking the lead in the rise of mobile technology, and the opportunities are promising. The number of FinTechs – start-ups offering these services – in Africa is growing daily (Mesropyan, 2016). Commercial Bank of Africa’s M-Shwari in Kenya and M-Pawa in Tanzania lead the way with 13.5 million and 4.8 million users, respectively (Vidal and Hwang 2017 and GSMA 2017).

Most past studies have acknowledged that digital credit has had a positive influence on business performance in other countries and in Kenya, {(Utami & Sitanggang 2021); Ngaga (2020); Mararo (2018) Agola (2017); Govil et al., (2014)}.

In reality, however, small businesses’ productivity remains low and their sizes remain small (Bloom and Van Reenen, 2010). A large number of small businesses for instance are wary of using digital credit harboring reservations over a number of factors; being listed with Credit Reference Bureaus (CRBs), short tenors, insufficient credit limit, high-interest rates, data privacy, and customer protection are the major reasons why a large number of Kenyans are hesitant to borrow from the digital lenders, (Business Today 2020). In particular, the effective interest rates charged to consumers are typically quite high – for example, the “facilitation fee” for an M-Shwari loan is 7.5% per month (138% APR), and many products are much more expensive than this (Karlan and Zinman 2010). Digital credit also gives a defined amount based on the client’s history. In the case of M-Shwari, these amounts are not very large and the average M-Shwari loan is about USD 12 (Cook and McKay 2015). This may lead to multiple loans from different lenders at the same time to consolidate debt, finance a large purchase, or simply access more credit.

From the foregoing exploratory review, it is apparent that most past studies acknowledge that digital credit has had a positive influence on business performance in other countries and in specific towns in Kenya, {(Utami & Sitanggang 2021); Ngaga (2020); Mararo (2018) Agola (2017); Govil et al., (2014)}. Other studies however revealed that digital credit hasn’t led to business performance, (Karlan and Zinman 2010); (Cook and McKay 2015) and Kiiti et al. (2016). These studies however, have generally focused on the potential disadvantages before taking out a loan to small business without necessary extension on how this affected their performances. Those that focused on performance were done in urban centers or in different countries without majorly focusing on the attributes of digital credit which may affect business performance. Digital credit for instance, has small loan amounts with short loan terms. In this regard, a better understanding of the effect of digital credit and how small businesses interact more so in an informal settlement area is critical. This study investigated mobile credit access, loan amount and loan interest and its effects on the performance of small businesses from an increased sales volume, operating cash flow and net

profit margin perspective in Obunga railways ward, Kisumu.

Study Area

The study was carried out at Obunga, railways ward in Kisumu County, Kenya. Obunga is located at the East of Kisumu County and it is divided into four sub-locations: Central, Kamakowa, Nyawita, Kasarani and Sega (Munala, 2009). The selection of study site was purposely selected due to the fact that Obunga is the largest commercial center in Western Kenya. It is a vibrant location with so many informal sector businesses which employ thousands of people thus was appropriate for providing a center for this study, (Oloo and Ojwang 2010).

Statement of the Problem

Obunga railways ward in Kisumu has a character all of its own that brings many challenges. A lack of capital and jobs keeps residents entangled in poverty, and forces them into small businesses to provide for employment and also to provide for their families. Ideally, digital credit is a source of financial services for entrepreneurs and small businesses lacking access to banking and related services. These include the provision of small loans to small businesses, especially in informal settlement areas, at full-cost interest rates, without collateral, that are repayable after a given period of time. However, prohibitive cost of credit, amounts disbursed based on scores may still limit access to credit to these businesses in Obunga to either start or expand. For instance, loans accessible for the hustler fund are as little as Kshs 500 to as much as Kshs 50,000 (Cytonn 2022). Reports show that the majority could only access between 500-1000 which could be insufficient for growth and expansion of businesses. In the event one fails to repay within a month an annual interest rate on the non-performing loan being raised to 9.5% and their account being frozen. The consequences of defaulting on a business loan can be severe. These businesses' credit rating may be damaged, and it may even be forced to close. While most studies have focused majorly on the relationship between digital credit and business performance, there isn't much understanding on which attributes of digital credit best affect performance of businesses in an informal settlement of developing countries. This research will therefore bridge this gap by examining the effect digital credit has on the performance of small businesses in Obunga, railways ward in Kisumu County, Kenya.

Purpose and Objectives

The main objective of the study was to assess the effect of digital credit on small business performance in Obunga railways ward in Kisumu County. Specific research objectives are: to establish the effect of digital credit access on performance of small business in Obunga railways ward in Kisumu Kenya, to examine the effect of digital credit cost on the performance of small business Obunga railways ward in Kisumu Kenya and to determine the effect of digital credit amount on the performance of small business in Obunga railways ward in Kisumu Kenya.

THEORETICAL PERSPECTIVE

Asymmetric Information theory

Akerlof in 1970 developed theory (Asymmetric Information theory) which explains the imbalance in the market where one party has more information about the products or service than the other. In a perfect market setting, where there is perfect information available to both parties and there are no doubts regarding trade, none of the parties suffer from market failure of information. However, in the real world today there is no perfect nor costless, and additionally small businesses finance market has been characterized by risk and uncertainty regarding trade. Information is spread asymmetrically between the lender (in this case digital credit) and borrower (small businesses). From the lenders perspective, it has incomplete information with

regard to management of small firms, giving rise to the problem of adverse selection (Stiglitz and Weiss, 1981) and small businesses may fail to perform to their full capabilities, giving rise to the problem of moral hazard. This situation makes the other party disadvantaged when it comes to making decisions regarding the financial contract at hand. The problem is; a digital credit firm will accept a loan application but at a higher than risk-adjusted interest rate or they will accept but with strict collateral requirements or even reject the loan application.

Default Risk Theory of Credit

While Asymmetric Information theory explains the imbalance in the market, it is important to understand equilibrium credit rationing based on default risk.

Rationing Hogman, (1960) was the first to develop a theory of equilibrium credit rationing based on default risk. According to this theory, higher interest rates raise default risk which in turn leads to lending losses. Therefore to avoid this unrestricted and rational lenders prefer to set loan interest rates below market clearing levels and then ration credit. This thesis rests on the nature of credit supply under risky and competitive market conditions. Credit rationing is generally defined as a situation where the demand for loans exceeds the supply of loans at the loan interest rate determined by banks. In other words, although there is excess demand for credit at a given interest rate, banks do not respond to it by increasing loan interest rates to the market clearing level where demand becomes equal to supply. Therefore, the excess demand is rationed by non-price criteria (Stiglitz and Weiss, 1981). As banks intermediate between the demanders and the suppliers of funds, they incur costs because deposits and loans are not synchronized. Banks thus charge prices for intermediation services offered under uncertainty, and set interest rate levels for deposits and loans (Kasekende and Pondo, 2005). The spread between the gross costs of borrowing and the net return on lending define the intermediary costs. The latter includes information costs, transaction costs (administration and default costs) and the operational costs. If borrowers and lenders costs vary unrelated to intermediary costs, then the interest rate spread varies with transaction costs of financial intermediaries. Pure spread (due to transaction uncertainty) is influenced by the degree of bank risk management, market structure in which the bank operates, size of the bank transactions and the interest rate variability (Ho and Suander, 1981). The actual spread (which includes imperfections in the market) is influenced by macroeconomic variables, monetary policy and fiscal policy activities, and risk factors.

METHODOLOGY

The study used a descriptive research design. The descriptive design was applied since the study involved describing a relationship that exists between digital credit and small business performance. The study used Semi-structured questionnaires and interviews as primary data collection instruments. Secondary data was collected through reviewing available records regarding digital credit and small business performance.

Sample Size and Procedure

There are 454 small businesses in Obunga, railways ward that offer vegetables and foodstuffs, fast foods and beauty services.

The sample size for which the survey was conducted was arrived at by using the Yamane formula as below to arrive at the sample size of this study.

; $n = \frac{N}{1 + N(e^2)}$

(1+N (e2))

Where n =Sample size for target population, N =Population

$$n=454/(1 +454(0.05)^2)$$

$$n=454/(1+454(0.0025))$$

$$n=454/(1+1.135)$$

$$n=454/2.135$$

$$n=212.646$$

(Yamane 1967).

The sample size surveyed were 212 business owners in Obunga.

FINDINGS AND DISCUSSIONS

Response Rate

A total of 212 questionnaires were administered to the respondents and 119 were correctly filled and found fit for analysis. The response rate of 56.1% is deemed sufficient when compared to the response ratings put forth by Mugenda and Mugenda (2003).

Response rates of 50%, 60, %, and 70% are classified as adequate, good and very good, respectively. The data was collected in the month of September-October 2023.

Data Collection Instrument

Questionnaires were used as instruments of data collection. According to Yin (2017) the most common method and form of collecting primary data is the use of questionnaires. The questionnaire was structured so as to give standard answers that make the data collection, analysis and presentation of findings simpler and easier.

Validity and Reliability of the Instrument

The researcher utilized 11 questionnaires in pilot-testing the instrument to ensure validity and reliability of the instrument. The respondents filled the questions and it was analyzed and any problems and issues including length, leading questions and ambiguity were noted and corrected before the final instrument was made for data collection. Pilot-test was conducted to ensure that questions were well framed and the language used was appropriate for the target respondents.

Validity of the Instrument

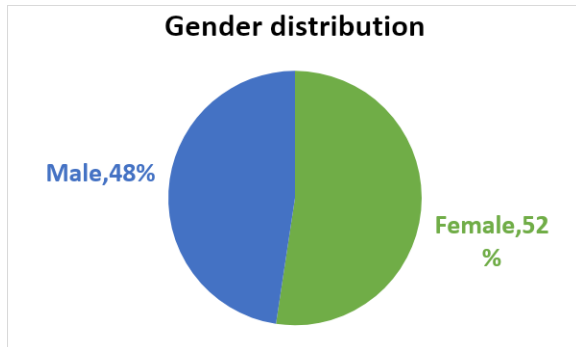
Litosseliti (2018) noted that validity gives information about the degree to which a test adopted by a researcher measures that which it is expected to measure. It helps in ensuring that the tests adopted are not distorted hence affecting research outcome. Taherdoost (2016) noted that this can be ensured by engaging a qualified person known as an expert to provide his or her opinion prior to the main study. Validity test was done through sharing the documents with the supervisor who has a vast experience in supervising projects of this nature.

Data Analysis and Presentation

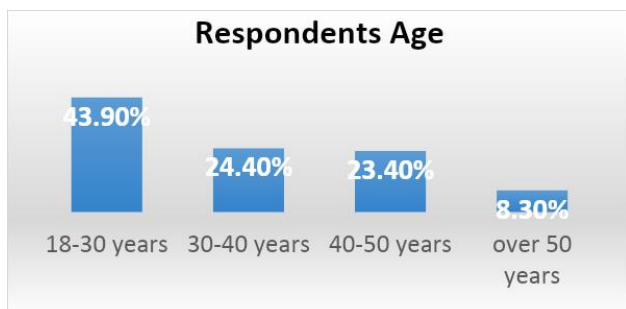
Demographic Information

Gender

From the responses, as shown below, it was notable that women were 52.40 % while men were 47.60%.



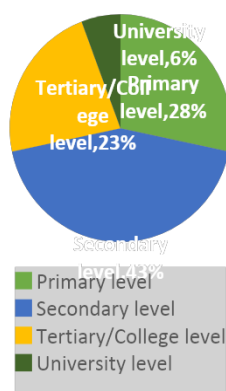
Age
Majority at 43.9 % were found to be aged between 18-30 years, 24.4% aged between 30-40 years, 23.4% of the respondents aged between 40-50 years and 8.3% were above 50 years as shown below. This implies that small businesses in Obunga area are majorly run by people in the youthful age bracket of ages below 30 years.



Highest level of Education

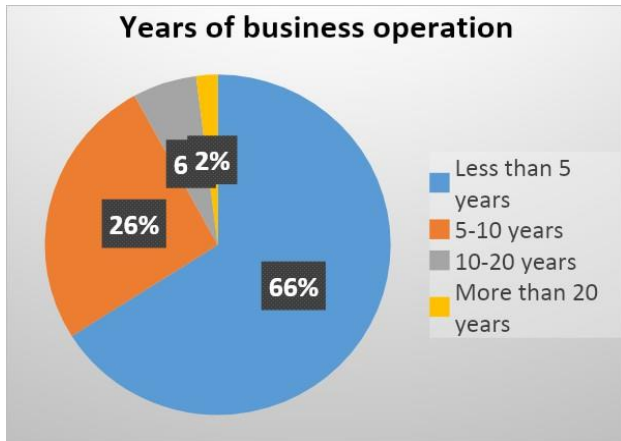
Majority 43% indicated that they had reached secondary school level, 28% had reached primary school level, 23% reached college and 6% had reached university level. This implies that the respondents had the ability to interpret the information sought in this study.

Level of education



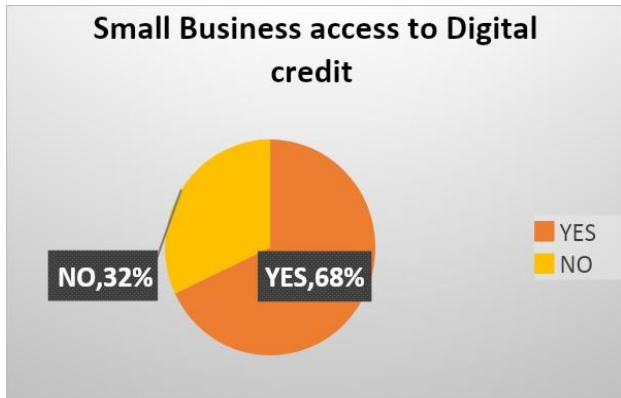
Years of business operations

The study found that the majority of the business at 66% are young and have been in operation for only between 0-5 years. This shows that the businesses could also be in their developmental stages. Further, findings are shown in the figure below.



Effect of digital Credit Access on Business Performance

On the question of whether small businesses had access to digital credit for their businesses. The study found that the majority 68% have accessed digital credit and 32% had never accessed it. This suggests that digital credit is an important tool that is familiar to small businesses and they use it for business.

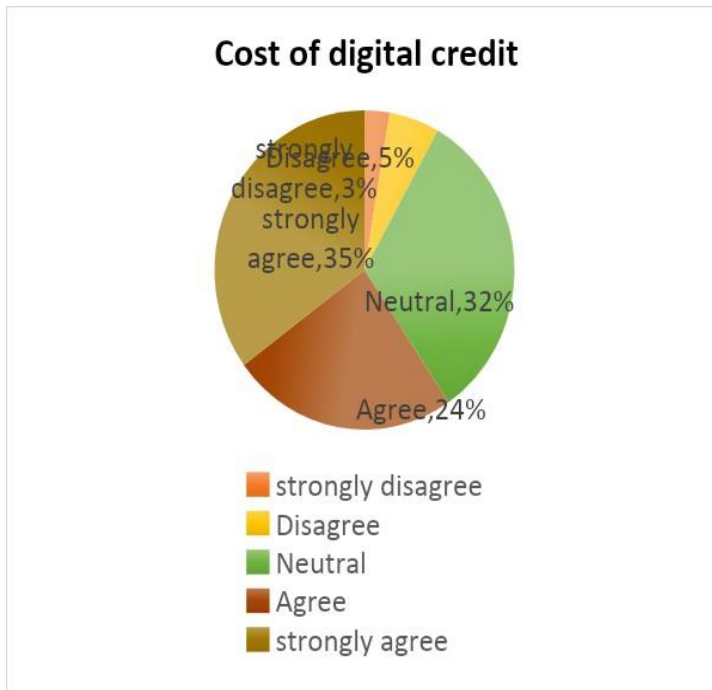


On the question of rating if digital credit access has improved business performance, 5.04% of the respondents strongly disagreed, 8.40% disagreed, 14.28% were neutral, 31.9% agreed, and 40.33% strongly agreed as shown in Table below. This implies that digital credit has really enhanced small businesses' performance.

Scale	Frequency	Percentage
Strongly Disagree	6	5.04%
Disagree	10	8.40%
Neutral	17	14.28%
Agree	38	31.9%
Strongly Agree	48	40.33%
Total	119	100%

Effect of cost of Credit on Business Performance

When the respondents were asked to indicate whether the cost of digital credit was high or low. Majority indicated that the cost charged is very high at 35%, 33% said it was fair, 24% said it was high, 5% said it was low while only 3% said that it was very low. This implies that digital credit is costly for businesses services as much as it may help and lowering the cost could be crucial for small business.

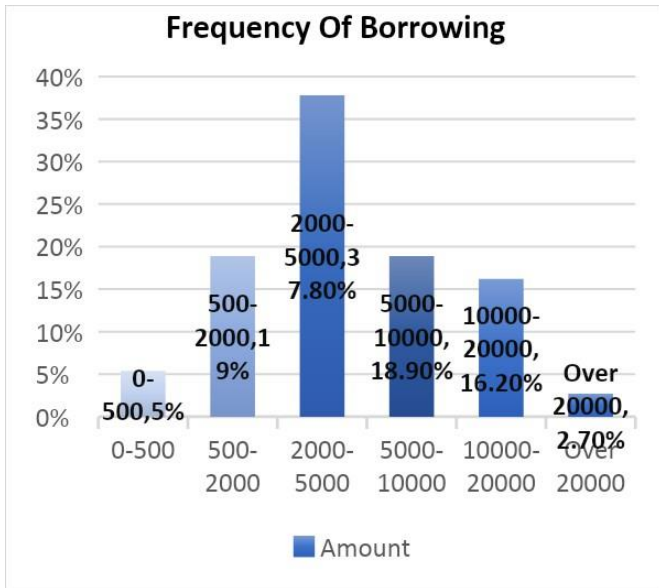


On the question on rating if digital credit cost has led to improvement of business performance, Majority of the respondents strongly disagreed: 43.69% of the respondents strongly disagreed, 21.84 % disagreed, 10.08% were neutral, 16.8% agreed and only 7.56 % strongly agreed as shown in Table below. This implies that digital credit cost is high and has not enhanced business performance.

Scale	Frequency	Percentage
Strongly Disagree	52	43.69%
Disagree	26	21.84%
Neutral	12	10.08%
Agree	20	16.8%
Strongly Agree	9	7.56%
Total	119	100%

Effect of Digital Credit Amount on Business Performance

When the respondents were asked to indicate the amount they have received from digital credit for business majority (37.8%) indicated to have received between 2000-5000ksh, 19% indicated that they’ve received between 500-2000ksh, 18.9% indicated that they’ve received 5000-10000ksh, 16.2 % received between 10000-20000, 5% received between 0-500 and only 2.7% received over 20000ksh. The implication is that digital credit give amount in different amounts which could be as a result of limits set for each borrower.



On the question of whether the aforementioned loans were enough or not enough, 58% indicated that the loans were not enough for their business. They opted for an increase in the amount being disbursed. However, 42% indicate that the loan was enough. On the question on rating whether digital credit amount leads to increase in cash flow, Sales or Net profit margin majority of the respondent strongly agreed that digital credit helps in improving cash flow, Sales.Net profit margin. 38.65 % of the respondents strongly agreed, 23.52 agreed, 20.16% were neutral, 15.12% disagreed while only 2.5 % strongly disagreed.

Scale	Frequency	Percentage
Strongly Disagree	3	2.5%
Disagree	18	15.12%
Neutral	24	20.16%
Agree	28	23.52%
Strongly Agree	46	38.65%
Total	119	100%

CONCLUSIONS

Financial Access and Performance of SME

The study concludes that performance of the SMEs could be seen from profit margins and that most of them collapsed within one year of starting. Financial exclusion occurred mostly among low income SMEs and their access to finance was critical to the formation, growth and survival of the enterprises. The primary sources of finance available to SMEs included loans from banks and non-bank financial institutions, however, the main challenge of their access to credit was lack of collateral demanded by financial institutions. Credit was an important instrument for improving the performance of the SMEs and entrepreneurial characteristics significantly influenced SMEs’ access to finance.

Credit cost and Performance of SMEs.

The study concludes that the fast growth of fintechs had increased the cost of borrowing to SMEs and their repayment problems had driven them into a vicious cycle of taking out more loans. The results of the study showed a negative and significant influence of the transaction cost of mobile credit on financial prosperity

of micro entrepreneurs. The implication is that an increase in transaction cost of mobile credit leads to a decline in financial prosperity for the small and micro entrepreneurs in terms of profitability, leverage and liquidity. It was therefore concluded that increase in application cost rates, interests on mobile loans and penalty costs leads to low profitability, leverage and low liquidity.

Amount and Performance of SME

The study concludes that fintechs offer flexible loan contracts to SMEs who have the ability to determine their own preferred loan repayment schedule. SMEs' loan repayment schedule was dependent on the prevailing state of the world, thus most financial institutions had increased outstanding balance withheld by the businesses. A well-developed microcredit system helped SMEs to access affordable credit services where flexibility in the repayment method had improved their performance, and reduced the stress of the repayment process. SMEs' problems required a fuller understanding, not just injection of capital, but flexible loan structures had been adequate for the businesses in generating regular returns and had increased the investments in the businesses' enterprises activities.

RECOMMENDATIONS FOR IMPROVEMENT FINANCIAL ACCESS AND PERFORMANCE OF SMES

The study recommends the managers and owners of SMEs in Obunga ward to adopt an entrepreneurial mind-set. This would ensure that their businesses had established and acquired the appropriate business environment that would support their ability to better gain financial access from various financial institutions. Entrepreneurial mindset is a critical factor in the accumulation, evaluation and selection of the knowledge which can lead an individual into potential business opportunities thereby firm performance.

Cost of credit and Performance

Based on the study findings, it is recommended that the government mobile loan institutions should consider lowering the costs involved in lending the credit. It is recommended that the government should regulate the interest rates and default penalty costs that are imposed on borrowers in order to enhance business profitability, leverage and liquidity.

Amount of credit and Performance of SMEs

The study recommends the managers and owners of SMEs in Obunga ward to make use of available flexible repayment options to borrow what their businesses actually require. Flexible loans are a great hit amongst SMEs who need flexibility in repaying the money that they have borrowed. In particular, increasing repayment flexibility would greatly reduce the burden of indebtedness among SMEs which would be essential in reducing the default rates. This would provide them with the finances to improve their businesses whilst reducing the burden of repayment. This would significantly improve their performance and financial stability

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