

Impact of Accounting Record-Keeping on the Sustainability of Small-Scale Enterprises in Kano Metropolis

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Abstract

This study examined the impact of accounting record keeping on sustainability of small-scale enterprises (SSEs) in Kano metropolis. The population of this study comprised of all SSEs operating in the eight local government areas that constitute Kano metropolis. Four hundred and thirty-nine (439) questionnaires, using 5-point Likert scale, were administered on the sampled owners of SSEs across the eight local government areas in Kano metropolis. Out of this, four hundred and thirty-seven (437) questionnaires were completed and returned, while two respondents did not return their questionnaires. The statement on the questionnaire covers accounting record keeping, business performance, environmental attitude and community attitude. Structural equation modelling (SEM) analysis using Partial Least Square (PLS) was employed to analyze the data generated for the study. The finding of study shows that record keeping has a significant positive relationship with sustainability. This indicates that an increase in the record keeping behavior will lead to an increase in the sustainability of a business entity. The study, therefore, recommends that SMEs owners should learn basic record keeping knowledge or engage the service of bookkeepers to enable them to keep proper books of accounts which will in turn increase the sustainability of their businesses.

Keywords: Accounting record-keeping, Performance, Small-scale Enterprises, Sustainability.

1.0 Introduction

The report on small scale enterprises (SMEs) in developing countries of 2011 by the world bank revealed that although nearly half of all start-ups fail within 5 years, a few of them grow to become large firms. This indicates high mortality rate of SMEs in the developing countries. The situation is more worrisome in Nigeria as about 80 percent of SMEs fail within the first five years of their existence (Muriithi, 2017). Although African continent has shown significant improvement in business environment in the last ten years resulting in attracting numerous businesses from different parts of the world, yet, the continent is still ranked by the World Bank as the most difficult region to do businesses for SMEs (World Bank, 2006). In many African countries, SMEs, find it difficult to do business due to unfavorable business environment arising from hostile legal requirements, high taxes, inflation and unstable exchange rates which makes it difficult to make adequate profits to survive (Olawale & Garwe, 2010).

SMEs play an important role in economic growth of both developed and developing countries across the globe. SMEs sector serves as catalyst for the provision of employment, fostering economic growth, advancing technological progress and innovation, improving social prosperity, as well as, serving as mechanism for poverty eradication (Gbandi & Amisah, 2014; Aminu et al, 2015). The sector reduces the flow of people from rural to urban areas, enhances sustainable economic growth and development, contributes substantially to gross domestic product, export earnings and supports the production of indigenous products (Agwu et al, 2014). Many developing countries across the world have formulated favourable policies to foster the development of these entities within their territory (Maseko et al, 2011;

Madurapperuma, 2016). For example, the SMEs sector has been identified as a significant strategic sector in the overall policy objectives of the Government of most countries of the world and it is seen as a driver of change for wide-ranging economic growth, regional development, employment generation and poverty reduction.

Nigeria like other developing economies, requires sustainable economic growth and development, hence, has put in place number of policies to enhance the development of SMEs. Several regimes have implemented a number of programs in their efforts to develop vibrant SMEs sector that can contribute immensely to the economy at regional and national levels. Unfortunately, most of these programs have failed in achieving their expected results (Chinedu et al., 2010). The failure to succeed has drawn the attention of scholars in the country to find out possible solution to the problem.

However, most of the studies on challenges faced by SMEs have focus on the external problems bedeviling the growth and survival SMEs. The major issues addressed by prior studies include access to financing, multiplicity of taxes, high cost of doing business, negative perception, access to reliable information, government support and corruption among the others (Olawale & Garwe, 2010; and Madurapperuma, 2016). Nevertheless, only few of the studies were conducted on internal factors (for example, poor management, lack of competency and capability, absence of intangible assets and poor location among others) that militates against the sustainability of SMEs (Gbandi & Amisah, 2014; Aminu et al, 2015). This clearly shows that there is a considerable research gap regarding studies that deal with the impact of accounting record keeping and other internal factors on SME's sustainability.

It is in this regard, that this study sees record keeping as one of the critical success factors for the sustainability of SMEs in Nigeria. This is because, proper record keeping will help in tackling a number of both external and internal constraints bedeviling the sustainability of SMEs in Nigeria. For example, with good record keeping, an SME can have easy access to external financing, resolve a number of tax issues, monitor costs, get external grant, assess its capabilities and competencies, and evaluate the quality of its intangible assets among others. The literature documents that many SMEs do not keep proper accounting records, which would have enabled them to generate accurate financial statements (Aladejebi & Oladimeji, 2019). Record keeping consist of identification, classification, summarization, storage, protection, communication, retention and disposal of records for preparation of financial statements. Availability of accurate financial information is essential to owners and managers in measuring financial performance and efficiency of managerial decision (Aminu, et al., 2023 and Amoako, et al., 2014). In fact, the growth of organization is largely determined by its financial performance in emerging economies (Mustapha & Abdullahi, 2023). Lack of accurate financial statements jeopardizes the SMEs' access to credit facility from banks, government grants among others that would improve the sustainability of those entities. Financial statements are prepared from books and accounts containing information on the financial inflows and outflows in relation to assets, liabilities, income, and expenses (Williams et al, 2008). To maintain a proper accounting record, policies, systems, procedures, and personnel should be put in place (Ademola, et al., 2012). Users of accounts include owners of the businesses, creditors, employees, investors, creditors, and relevant government agencies among others. In the light of the foregoing this study assesses the impact of record keeping on the sustainability of SMEs in Kano metropolis, with a view to enhancing the continued operation and survival.

2.0 Literature Review and Hypotheses Development

The Concept of Sustainability

Sustainability is an approach that creates long-term stakeholder value by implementing a business strategy that considers every dimension of how a business operates in the society, environment and economic spheres. According to Shi, et al., (2019) the theory of Sustainable Development (SD) has gone through three periods. The embryonic period (before 1972), the molding period (1972-1987) and the developing period (1987-Date). The Brundtland Report (1987) provides a well-known broad definition of SD as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (Diesendorf, 2000; UNESCO, 2015). The concept is concerned with maintaining a balance between economic, social, and environmental considerations (the three pillars of sustainability). It is, in fact, about the long-term survival of the planet earth for continued habitation of living organisms that form its ecosystem (BRL, 2021).

From an industrial perspective, it means that firms need to be responsible and take account of resource usage (Kleindorfer et al., 2009), preventing the depletion of natural resources (Axelsson et al., 2011) and addressing issues pertaining to biodiversity, conservation, and ecological integrity. It also requires the control of the subsequent environmental pollution that are created (due to activities such as production and use of natural resources), as well as judiciously act to maintain employee health and safety. It also focuses on the protection of quality of life of the external community and ensuring liquidity and profitability for the firm (Gimenez et al., 2012; Khan et al, 2021; and George & Schillebeeckx, 2022).

According to Elkington (1998), sustainability consists of three pillars, namely economic sustainability, which aims to ensure liquidity and profitability (Schulz and Flanigan, 2016). Social sustainability, which contributes to the development of human and societal capital. While, environmental sustainability, which refers to the consumption of those resources that can be reproduced from living and non-living things (Norman et al., 2004; Hubbard, 2009; Khan et al, 2021; Philbin et al, 2022). The goal of SD evolves from pursuing the single goal of sustainable use of natural resources, to Millennium Development Goals (MDGs), and now to more comprehensive and universal Sustainable Development Goals (SDGs) and business sustainability. Sustainability has now become a fundamental strategy to guide the world economic, social, and environmental transformation (Shi, Han, Yang and Gao, 2019). This means that the current progression of sustainability requires a shift from homogenic systems of 'doing things better' towards holistic systems of 'doing better things' (Sterling, 2004; McKibben, 2007).

The SD process demands systemic change and innovation in products, lifestyles, ecologies, processes, and structures, which suggests that an integrated SD system must include sustainable environments, sustainable mindsets and sustainable business models (SBMs) correspondingly (Khan et al, 2021). Philbin et al., (2022) contends that SMEs need access to the necessary skills and knowledge to pursue a pathway towards sustainable development. For the purpose of this study, sustainability is the ability of SMEs to make profit and maintain liquidity, ensure environmental protection in the course of their operations through the use of resources that can be recycled and reproduced, as well as, contributing to the social welfare of their immediate community.

The Concept of Record Keepings

Recording keeping is the maintenance of books of accounts of financial transactions of a business, for taking informed judgements and decisions. It is important for planning, decision making and control, without which a firm will find it difficult to thrive. Aruwa (2005) and Reed (2005) defined record keeping

as the art of keeping record of financial transactions of a business in a systematic and chronological order, such that the records kept will provide means by which an enterprise can be managed in an orderly manner. Record keeping is the process of identifying, classifying and keeping in a systematic and logically manner records of business transactions of an enterprise to facilitate the preparation of financial statement for the purpose of performance evaluation (Balagobei, 2019).

Generally, the literature documents two methods of keeping business records; Single entry and Double entry bookkeeping systems. Ademola, et al., (2012) and Eric & Gabriel (2012) document that single-entry bookkeeping system is an informal system where a business maintains records of income and expenses using cash book or receipts and payments account. Single entry bookkeeping may be adequate for small businesses. However, double-entry book keeping is a standard approach to recording each transaction in strict compliance with the double entry principles; which require the posting of debit and credit entries from the books of original entries (cash books and journals) to the various accounts in the ledger (Adeoti & Asabi, 2018; and Senzu & Ndebugri, 2018). For the purposes of this study, record keeping entails keeping records of all business transactions either in the form of single entry or double entry, using manual or computerized system.

The literature documents numerous benefits of good record-keeping practice to businesses. This include serving as the yardstick for inter and/or intra performance comparison, serving as the basis for the preparation of final accounts for planning and control by management, facilitating filing of reports and tax returns to government regulatory agencies, as well as disclosing record keeping error, waste, fraud, and employee financial misconduct (Longenecker, et al., 2006). According to Maseko & Manyani (2011), accounting systems provide information to management for performance evaluation and control purposes. Ademola, et al., (2012) explain that record keeping provide the basis for liquidity assessment, financial evaluation, managerial planning, control and decision-making. Okoh & Uzoka (2012) explain that the roles of accounting information also include serving as the basis for credit extension by lenders and for computing taxes by relevant tax authorities. Muchira (2012) explains that good financial records positively influence managerial decisions. The most important information to an entrepreneur comes from the accounting information system. According to Nkwor & Nkwor (2015), an efficient and effective record keeping is important to any organization, as it affords a measurement and communication mechanism which can help in improving the quality of decisions and actions which affect the way the scarce resources of an organization is put into use.

Machera & Machera (2017) explains that the use of accounting software to keep records of business financial transactions ease stock reconciliation, keep track of business assets and provide basis for comparability of financial performance. It also provides financial intelligence for a business, speeds of processing of transactions and enhances completeness and accuracy of accounting information. Good record keeping enables business firms to plan properly, and to curtail misappropriations of resources (Mwebesa, et al., 2018).

The Concept of Micro and Small-Scale Enterprises

There is no consensus in the literature as to the definition of SMEs among researchers and institutions. However, the common yardsticks used in defining the concept include turnover, value of assets, number of employees, amount of capital and the form of ownership. The Nigerian National Policy on MSMEs (2015) defined SMEs as businesses with capital not exceeding N100,000,000, excluding the cost of land and having a staff strength of not more than 50 people. According to Central Bank of Nigeria any business

with less than fifty employees, and total assets not exceeding 500 million Naira is a small and medium scale enterprise.

Micro enterprises in South Africa, Kenya and Nigeria are businesses whose employees ranges between 1 to 9 individuals and whose assets base excluding land and building is less than N5 million (Ruhui, et al., 2014 and Yahaya, et al., 2016). The National Policy ratification to define micro, small and medium enterprises, classifies SMEs into three groups, with the exception of land and building. Businesses with less than 10 employees and capital of less than N5 million as micro enterprises; firms with 10 to 49 employees and net assets between N 5-50 million as small enterprise; while businesses with 50 to 199 employees and a capital base of N 50-500 million as medium enterprises (National Policy on MSMEs Report, 2015). From the foregoing, small and micro enterprises are considered as a business own by one with a maximum of twenty owners, employing 2 to 49 persons and with a capital of between N 5 million to N 50 million.

Review of Empirical Studies on Record Keeping and Sustainability of SMEs

Prior empirical studies document diverse result on the association between accounting record keeping and sustainability of MSE across the globe. On the role of MSEs on job creation to members of their host communities, the literature shows that MSEs provide job opportunities for their host communities (Aremu & Adeyemi, 2011). Ademola, et al., (2012) examined the roles of record keeping on the survival and growth of small-scale enterprises (SSEs) in Kogi State. The data collected from primary and secondary sources was analyzed using Chi- square. The study documented that SSEs record keeping behavior was poor and there was no relationship between record keeping and performance of the SMEs. Similarly, Maseko & Manyani (2011), Madurapperuma, et al., (2016), Zotorvie (2017) and Ajibade & Khayundi (2017) study the financial accounting practices of small-scale enterprises in Zimbabwe, Sri Lanka, Ghana and South Africa, respectively. The studies found that the business failed to keep proper books of accounts and hence find it difficult to determine the profit or loss of their business, access finance, as well as the condition of their assets and liabilities.

In Contrast, Abdul-Rahamon & Adejare (2014) documented that financial record keeping influenced the performance of micro enterprises as it facilitates timely and efficient decision-making processes. Ezejiolor & Olise (2014) and Muazu and Alhassan (2014) found out that record keeping significantly affect the performance of micro enterprises in Nigeria and Ghana, respectively. Similarly, Agbemva et al., (2016) found that keeping accounting records impact on the growth of SMEs in Ghana. Sajuyigbe, Adeyemi and Odebiyi (2016) examined the effect of financial management practices and women entrepreneurs' performance in Osun State-Nigeria. The study documented that financial management practices contribute to the performance of the enterprises. In the same vein, Adurayemi (2016) examined the effects of financial record keeping on the performance of small and medium scale enterprises in Nigeria. The finding revealed positive relationship between financial record keeping and SMEs performance.

Furthermore, Adeoti & Asabi (2018) and Aladejebi & Oladimeji (2019), examined the effects of record keeping practices on performance of micro enterprises in Lagos State. The result revealed that record keeping practice has significant impact on the performance of micro enterprises in Lagos State. This finding concurs with that of Mwebesa, et al., (2018) and Nassiuma (2019), which shows that accounting record keeping influence the financial performance of micro entrepreneurs in Western Uganda and Kenya, respectively. In another study, Balagobei (2019) examined the impact of record keeping on the performance of small and medium enterprises in Sri Lanka. The finding show that financial recording

keeping practice of the sampled firms influence their performance, attainment of their objectives, and enhances organizational effectiveness and efficiency. Muhammad & Isah (2020) documented that financial record keeping has a significant and positive impact on the growth and survival of SMEs in Zaria, Kaduna State. Similarly, Olajide & Obialo, (2020) documented that record keeping among small scale entrepreneurs in Ogun State influence profitability, operational efficiency, growth and survival of the sample firms. In the same vein, Sooriyakumaran, et al., (2020) found that proper accounting records keeping affect productivity, performance and management of enterprises in Sri Lanka. The foregoing shows that there were several empirical studies which found that accounting records keeping provide enormous benefits to SMEs which enhances their sustainability, continued operations and survival. Based on the review of empirical evidences, the following hypotheses were developed to guide the study:

Ho₁: Accounting record keeping has no significant impact on the performance of Small-Scale Enterprises in Kano Metropolis

Ho₂: Accounting record keeping has no significant impact on the community of Small-Scale Enterprises in Kano Metropolis

Ho₃: Accounting record keeping has no significant impact on the environment of Small-Scale Enterprises in Kano Metropolis

3.0 Methodology

This study used a quantitative research design to achieve its objective of examining the relationship between accounting record keeping and sustainability of SSEs (Small Scale Enterprises) in Kano Metropolis. The study employed cross-sectional survey research design to collect primary data using close-ended questionnaire (Zikmund et al., 2013).

The population of this study comprised of all SMEs operating in the eight local government areas that constitute Kano metropolis. Since the population of the study is infinite (as there is no any documented record of the number of the SSEs in Kano metropolis), a sample of 439 SSEs were selected, which is slightly above the 384-sample size for a population of over 75,000, as suggested by Krejcie and Morgan (1970). This was with a view to cushion the effect of low response rate, missing and unusable questionnaire (Groves, 2006). Thus, this study adhered to the Salkind's view for adjusting sample size, which is commonly used in survey research (Bartlett et al., 2001). It was based on this, the sample size was increased by 55 to cover-up the possibility of lost questionnaires and uncooperative subjects, which the makes the sample size of the study to 439.

The study used stratified sampling technique, which ensures representation of all relevant subgroups of the population (SSEs in metropolitan local government areas). This technique has extra means of enhancing representativeness of the subjects of the population by ensuring the inclusion of representatives from all the strata of the population. Accordingly, the study area was divided into the eight local governments that made up the Kano metropolis. These local governments were Dala, Fagge, Gwale, Kano Municipal, Kunbotso, Nassarawa, Tarauni and Ungogo local government areas.

A questionnaire was developed based on the previous studies (Muhammad & Isah ,2020; Olajide & Obialo, 2020 and Sooriyakumaran, et al., 2020)on record keeping, firm performance and other measures of business sustainability. The questionnaire consists of five sections comprising of demographic characteristics of the respondents, record keeping behaviour, business financial performance, business environmental performance and business social performance. It was then subjected to pilot study to enhance validity and reliability. After the pilot study, some modifications were made to improve the quality of the research instrument.

Considering the nature and level of education of the respondents, the questionnaire was translated into Hausa language to facilitate ease of administration and mitigate constraints that may arise if the questionnaire was administered in English Language, which does not match the language of most of the respondents. Experts in Hausa Language reviewed the translated instrument and made further improvements. The questionnaire was then converted to Google form and administered online for those respondents with access to internet facilities while the hard copies were administered to the rest of the respondents who had no access to the internet facilities. To validate the research instrument, construct validity and reliability tests were conducted and the results are present.

Four (4) Research Assistants were used for data collection and each Research Assistant coordinated the administration of the instrument in two local government areas. Each research assistant receives a link with a soft copy of the questionnaire (using Google form). Prior to going to the field, three (3) training sessions were conducted for the research assistants to ensure smooth administration of the questionnaire. Then, the SSEs were randomly- selected, by the Research Assistants to participate in the study.

During the administration of the instrument, 439 questionnaires were administered on the sampled owners of SSEs across the eight local government areas that constitute Kano metropolis. Out of this, 437 questionnaires were returned, while two respondents refused to respond up to the end of the questionnaire administration period.

The data collected was cleaned and screened before running the analysis. This was with a view to detecting and correcting errors that may cause inconsistencies if the analysis is run without cleaning the data. The data collected were coded by asserting the items to conform with the constructs in a study, indicating that each construct is assigned to a different section that asks questions about it and the secondly by providing each item in a construct a code number for easy identification and analysis as presented in Table 1.

Table 1: Data Coding

Variables	Code
Record Keeping	RK
Business Performance	BP
Community Attitude	CA
Environmental Attitude	EA

Source: Developed by the Researchers, 2023.

All the responses are validated as the data collecting tool was modeled to detect and reject any entry falling outside the range of the values. This led to zero missing data as the tool was configured to have complete responses before accepting any set of questionnaires. Structural Equation Modelling (SEM) analysis using Partial Least Square (PLS) was employed to examine the effect of record keeping on the sustainability (performance, social and environmental) of SSEs in Kano Metropolis.

4.0 Results and Discussion

PLS-SEM Path Modeling

Path Modelling refers to the process in which diagrams are deployed to envision the hypothesized relationships among variables that are studied through Structural Equation Modelling (SEM). In SEM, constructs are represented in the path models as circles or ovals, while indicators or items which directly

measured proxy variables that contain the raw data, are represented as rectangles in the path models (Hair et al., 2012). Arrows represent the relationships between constructs, as well as between such constructs and their indicator. These arrows are always single-headed in PLS-SEM, and thus indicating directional relationships.

Assessment of the Measurement Model

The study used the individual item reliability, internal consistency reliability, convergent validity and discriminant validity to assess the reliability and validity of the measurement model. The individual item or factor reliability of the constructs was determined using the outer loadings of each construct’s indicators. Based on Hair's et al. (2012) rule of thumb, an indicator with 0.70 outer loading is seen as reliable and acceptable for already developed scale. As such, to maintain a particular indicator, the loading must be up to 0.70. Hence, following Hair's et al. (2012) rule of thumb, out of the 34 items measuring 4 reflective constructs of this study, 18 items (that is, BP3, BP7, BP8, BP9, CA2, CA3, CA5, CA6, EA1, EA2, EA6, EA7, EA8, RK1, RK2, RK6, RK7 and RK10) were deleted leaving the study with the remaining 16 items that are considered acceptable for further analysis.

Table 2: Outer Loadings for Individual Item Reliability

	BP	CA	EA	RKB
BP 1	0.72			
BP 2	0.77			
BP 4	0.80			
BP 5	0.82			
BP 6	0.80			
CA 1		0.74		
CA 4		0.77		
CA 7		0.83		
EA 3			0.76	
EA 4			0.77	
EA 5			0.69	
RK 3				0.80
RK 4				0.86
RK 5				0.83
RK 8				0.74
RK 9				0.71

Source: Computed from the Field Survey Data, 2023

The study used Cronbach’s alpha coefficient to measure the internal consistency reliability of measurement model. Cronbach’s alpha coefficient provides an estimate of the reliability based on the inter correlations among indicators. It checks whether the items that make up the scale actually measure the same underlying construct (Pallant, 2010). For this study, “Cronbach alpha coefficient” was employed because; the existence of internal consistency indicates that the items would measure the same underlying construct. All the research constructs have coefficients of more than 0.6 (Shi, Mo & Sun 2012). This threshold is highly acceptable for especially new measures as developed in this study. The study used Average Variance Extracted (AVE) in establishing the convergent validity of the reflective constructs. The rule of thumb for AVE value is 0.50 which indicates that the construct has a convergent

validity. As presented in Table 3, Business Performance (BP), CA, EA and Record Keeping have AVE of 0.62, 0.61, 0.55 and 0.62 respectively, which indicate that all the research constructs have an AVE of more than 0.50.

Table 3: Internal Consistency Reliability of Measurement Model

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
BP	0.85	0.90	0.89	0.62
CA	0.68	0.69	0.82	0.61
EA	0.61	0.58	0.78	0.55
RK	0.85	0.85	0.89	0.62

Source: Computed from the Field Survey Data, 2023

Discriminant validity is the other type of construct validity of reflective construct, which concerns with the extent to which a particular construct is distinct from other constructs of the same model based on empirical standards (Hair et al., 2012). Therefore, when a latent reflective construct is unique and captures phenomena not represented by other latent reflective constructs, it implies that the discriminant validity is established (Barros et al., 2010; Hair et al., 2012). Basically, there are two methods for assessing the discriminant validity (Hair et al., 2012). The first method employed in this study was the Fornell & Lacker criterion. According to this method, a reflective construct has discriminant validity when the square root of its AVE is higher than its correlation with any other reflective construct in the same model (Fornell & Larcker, 1981).

The square root of the business performance (BP), CA, EA and record-keeping as presented in Table 4 are 0.78, 0.78, 0.74 and 0.79 respectively. Based on this, all the constructs of the study have met the threshold of discriminant validity as the square roots of their respective AVEs are above their correlation with any other constructs as shown in Table 4.

Table 4: Fornell & Larcker

	BP	CA	EA	RKB
BP	0.78			
CA	0.29	0.78		
EA	0.30	0.12	0.74	
RKB	0.21	0.22	0.22	0.79

Source: Computed from the Field Survey Data, 2023

Using cross-loading as second method of measuring the discriminant validity of a construct, the indicators loadings of each construct must be higher than their corresponding loadings (cross-loadings) on other constructs (Chin, 1998). Based on this, all the latent construct used in this study have met the threshold of discriminant validity as the indicators loadings of each construct is higher than their corresponding loadings (cross-loadings) on other constructs as presented in Table 5.

Table 5: Cross-loadings

	BP	CA	EA	RKB
BP 1	0.72	0.27	0.17	0.12
BP 2	0.77	0.26	0.20	0.15
BP 4	0.80	0.26	0.27	0.11
BP 5	0.82	0.20	0.24	0.15
BP 6	0.80	0.18	0.28	0.24
CA 1	0.07	0.74	0.02	0.14
CA 4	0.34	0.77	0.17	0.18
CA 7	0.23	0.83	0.08	0.19
EA 3	0.37	0.14	0.76	0.14
EA 4	0.36	0.15	0.77	0.12
EA 5	0.03	0.01	0.69	0.20
RK 3	0.21	0.13	0.18	0.80
RK 4	0.23	0.16	0.16	0.86
RK 5	0.20	0.13	0.16	0.83
RK 8	0.10	0.23	0.21	0.74
RK 9	0.11	0.22	0.16	0.71

Source: Computed from the Field Survey Data, 2023

Relationship between Accounting Record Keeping and Sustainability (Structural Model)

This study investigates the impact of record keeping on sustainability of SSEs in Kano metropolis. The study, therefore, tests the hypothesis on the significance of the relationship between record keeping (RK) and sustainability. Table 6 reveals results of the structural model based on the relationship between record keeping (RK) and sustainability in general. These results are interpreted using the coefficients (Beta) of the path relationship, the standard error (SE), and t-value (T Statistics).

Table 6: Results of the Regression Analysis

Variables	Coef.	Std. Err.	t-value	P-value
Constant	3.689	0.066	55.782	0.000
Record Keeping	0.112	0.019	5.899	0.000
R^2	0.074			
<i>Adj. R</i> ²	0.072			
F-stat	34.798			
N	437			

Source: Computed from the Field Survey Data, 2023

The results indicates that record keeping has a significant positive relationship with the sustainability ($\beta=0.112$, $p<0.000$). This indicates that an increase in the record keeping behavior will lead to an increase in the sustainability of a business entity. That is to say, the more the records a business entity kept, the higher the sustainability of such business entity. The result is in line with the findings of Muhammad & Isah ,(2020), Olajide & Obialo, (2020) and Sooriyakumaran, et al., (2020). The R-square (R^2) is the measure of the predictive accuracy of a model, which is calculated as the squared correlation between the

endogenous construct's actual and predicted value (Hair et al., 2012). It represents the total effects of the exogenous latent variables on the latent endogenous variable. The R^2 of this model is 7.4 percent which indicates that record keeping account for up to 7.4 percent of the variation of sustainability, while other factors that were not included in the model account for the remaining percent of the variation in sustainability of SSEs.

Relationship between Record Keeping and Three Pillars of Sustainability

To ensure that the findings are free from unwanted bias, robustness tests were conducted to confirm that the results of the regression are insensitive to the individual components of sustainability measures. Sustainability measures were decomposed into its individual measures (business performance, attitude towards community and attitude toward environment). Separate regression models were run for each of the sustainability components as presented on Tables 7, 8 and 9.

Table 7: Results of the Regression Analysis (Business Performance)

Variables	Coef.	Std. Err.	t-value	P-value
Constant	3.703	0.097	38.281	0.000
Record Keeping	0.107	0.028	3.832	0.000
R^2	0.033			
<i>Adj. R</i> ²	0.030			
F-stat	14.68			
N	437			

Source: Computed from the Field Survey Data, 2023

Firstly, the study tested the hypothesis on the significant direct relationship between record keeping (RK) and business performance (BP) as presented in Table 6 above. The result indicates that record keeping has a significant positive relationship with the business performance ($\beta=0.107$, $p<0.000$). This indicates that an increase in the record keeping behavior will lead to an increase in the sustainability of an entity through increased business performance of an entity. That is to say, the more the records a business entity kept, the higher the performance of such business entity. The R^2 of this model shows 3.3 percent which indicates that record keeping account for more than three percent of the variation of business performance, while other factors that were not included in the model account for the remaining percent of the variation in business performance.

Secondly, the study tested the hypothesis on the significant direct relationship between record keeping (RK) and community engagement (CA) as presented in Table 8. The result indicates that record keeping has a significant positive relationship with the community engagement ($\beta=0.121$, $p<0.000$). This indicates that an increase in the record keeping behavior will lead to an increase in the sustainability of an entity through increased community engagement. That is to say, the more the records a business entity kept, the higher the community engagement of such business entity.

Table 8: Results of the Regression Analysis (Attitude toward community)

Variables	Coef.	Std. Err.	t-value	P-value
Constant	3.672	0.087	41.992	0.000
Record Keeping	0.121	0.025	4.798	0.000
R^2	0.050			
<i>Adj. R²</i>	0.048			
F-stat	23.025			
<i>N</i>	437			

Source: Computed from the Field Survey Data, 2023

The R^2 of this model shows five percent which indicates that record keeping account for up to five percent of the variation of attitude toward community, while other factors that were not included in the model account for the remaining percent of the variation in attitude toward community.

Lastly, the study tested the hypothesis on the significant direct relationship between record keeping (RK) and environmental engagement (EA) as presented in Table 9. The result indicates that record keeping has a significant positive relationship with environmental engagement ($\beta=0.111$, $p<0.000$). This indicates that an increase in the record keeping behavior will lead to an increase in the sustainability of an entity through increased environmental engagement. That is to say, the more the records a business entity kept, the higher the environmental engagement of such business entity.

Table 9: Results of the Regression Analysis (Attitude toward environment)

Variables	Coef.	Std. Err.	t-value	P-value
Constant	3.693	0.083	44.466	0.000
Record Keeping	0.111	0.024	4.634	0.000
R^2	0.047			
<i>Adj. R²</i>	0.045			
F-stat	21.473			
<i>N</i>	437			

Source: Computed from the Field Survey Data, 2023

The R^2 of this model is 5% which indicates that record keeping account for up to five percent of the variation in attitude toward environment, while other factors that were not included in the model account for the remaining percent of the variation in attitude toward environment.

5.0 Conclusion and Recommendations

The study documents that record-keeping plays significant role in ensuring the sustainability of a SSEs in general and on each one of the three components of sustainability. This implies that an SMEs that keep proper books of accounts have higher tendency of achieving going concern as the life of the business may outlived that of the owner/promoter of the business. This is because, record keeping will facilitates effective decisions, enhance access to finance and minimize tax liability. The study contributes to existing literature by incorporating other two elements of sustainability (community and environmental aspects) which are mostly neglected by most prior studies.



The study recommends that SMEs owners should learn basic record keeping knowledge to enable them to keep proper books of accounts which will in turn increase the sustainability of their businesses. In addition, SMEDAN should be organizing free seminars on the role and importance of record keeping to SSEs to curtail the number of premature closure of SSEs in their early life stage.

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