

## Financial Intelligence and Small Business Performance in Lagos State

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### Abstract

*Small businesses play sound contribution to economic growth and development as well as enhanced employment creation. The study aimed to determine the effects of financial intelligence measures: financial literacy, financial transparency, financial analysis decision and financial capability on small businesses in Lagos state. Due to poor financial intelligence measures which characterized with small business managers, owners and entrepreneurs which made them not to measure their financial stability and growth in achieving small business performance, thus, this study examines the effect of financial intelligence measures (financial literacy, financial transparency, financial analysis decision and financial capability) on small business performance measures (revenue generation and financial stability) in Lagos State. Survey research design was adopted and the use of multi-regression method of analysis was employed to analyse the generated data. The population of the study comprised of small businesses registered across five divisions in Lagos State that have been in existence for 10years and complied with SMEDAN regulations. The field data generated were normalized, valid and reliable for this study. Finding revealed that financial intelligence measures like financial literacy, financial transparency, financial analysis decision and financial capability significantly enhance revenue generation and financial stability of small businesses in Lagos state. The study concluded that financial intelligence measures like financial literacy, financial transparency, financial analysis decision and financial capability improve small businesses performance via financial stability and revenue generation in Lagos State, Nigeria. Thus, the study recommended that small business owners or entrepreneurs should embrace financial intelligence measures such as financial literacy, financial transparency, financial analysis decision and financial capability in order to enhance revenue generation and financial stability of small business performance in Lagos State.*

**Keywords:** *Financial intelligence, Financial literacy, Financial transparency, Financial analysis decision, Financial capability, Financial stability, Revenue generation.*

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## 1.0 Introduction

In today's business world, processes of making sound decisions in achieving business performance and survival has become a great challenge to business managers due to unstable business environment and hyper competition among businesses especially small businesses. This challenge of how to achieve business survival not limited to large and medium scale businesses but also small businesses due to mis-management of financial and non-financial resources, systematic and unsystematic risks that characterized small businesses operations (Chituru, et al 2021). Thus, small business performance and survival may not be achieved without sound financial intelligence measures.

The PwC MSME (2021) reported that small businesses in Nigeria are having mostly unskilled workforce and poor financial intelligence measures hence, this highlights a cause of concern that needs to be addressed speedily. To buttress PwC report (2021), financial intelligence will greatly enhance the financial stability and overall performance of small businesses, as well as globally and regionally positioning them to compete with their small-scale counterparts within Nigeria and in the export markets.

Given the challenges that small businesses face in achieving business performance in terms of financial stability and revenue generation, scholars believe that having a financial intelligence in the face of intense disruptions, market uncertainties, intense market competition, weak demand, and a turbulent environment is a critical recipe for small business continuity (Amos, et al 2021; Bienose et al, 2022). More specifically, the ability to detect financial stability, revenue generation, business opportunities, seize crucial market knowledge, and reconfigure them which have been able to identify as critical to the viability of small businesses functioning in a competitive, demanding, and dynamic environment in order to achieve economic growth and development (Onamusi et al 2019). Thus, Lagerwaard and De-Goede (2023) asserted that financial intelligence contributes and enhance managing aforementioned challenges in achieving business survival.

As further viewed by Lagerwaard and De-Goede (2023), financial intelligence focuses on the firm's confidence and ability to do anything and be proactive, as well as prudently deploy financial resources in order to efficiently optimize the solid return on investment. In the business world today, the decision on how to effectively and efficiently allocate limited financial resources is a key challenge in all organizations (Nwanyanwu & Nkiru, 2018), thus make small businesses in most developing economies including small businesses in Nigeria are not financial intelligence upright which created challenges in achieving for a positive business performance. In most small businesses in Nigeria, financial literacy, financial transparency, financial analysis decision and financial capability were explicitly considered and led poor financial decision and application of unpredictable factors which adversely affects small business continuity. Thus, financial intelligence measures such as financial literacy, financial transparency, financial analysis decision and financial capability may play important role in achieving survival of small businesses which need to be investigated and served as motivation for this study.

## 1.2 Statement of the Problem

Small businesses contribute to economic activities, growth and development as well as major employer of labour in every economy (PwC's MSMEs Survey, 2022). Meanwhile, poor resilience strategies to manage challenges such as rising costs of living, low naira's purchasing power, insecurity, and declining disposable incomes, cumulate into weak consumer demand and consequently dampen survival of small businesses as well as revenue generation for MSME operators in Nigeria (PwC's MSMEs Survey, 2022).

According to Bienose et al (2022), many small businesses encounter one or more challenges including poor financial intelligence measures like financial literacy, financial transparency, financial analysis decision and financial capability, with a constant shift that comes from dynamism as well as those from the environment in which they operate, which in turn adversely affect revenue generation of Nigeria small businesses. Furthermore, the complexities in the financial decision modelling toward financial intelligence measures of small businesses due to the vast amount of dynamic financial information and transactions performed to ensure that goods and services are delivered according to consumer specifications and needs, at the right time and in the right place have made small businesses in Nigeria more vulnerable to disruptive events which in turn negatively affect revenue generation (Amos et al., 2021; & Nnabuife, et al 2018).

Furthermore, Rono et al (2021) argued that small businesses managers or owners in developing economies are rarely and infrequently adopted financial intelligence measures like financial literacy, financial transparency, financial analysis decision and financial capability. This failure to give sound consideration to financial intelligence measures such as financial literacy, financial transparency, financial analysis decision and financial capability had led to failure of small businesses in Nigeria (Amos et al., 2021). Odebiyi, et al (2020) pointed out that in Nigeria, the most frequent challenges to the expansion and survival of small businesses are financial intelligence, financial inadequate infrastructure, low demand for goods and services, inadequate profits, poor management, corruption, lack of training and expertise, and support. Thus, there exist gap in the literature; where past related studies failed to consider how financial intelligence measures (financial literacy, financial transparency, financial analysis decision and financial capability) on revenue generation and financial stability as measures for small business performance in Lagos State, Nigeria.

## 1.3 Research Objectives

The main objective of the study was to examine the effect of financial intelligence on small business performance in Lagos State. The specific objectives were to:

- (i) examine influence of financial intelligence measures (financial literacy, financial transparency, financial analysis decision and financial capability) on revenue generation of small businesses in Lagos State; and
- (ii) assess the effect of financial intelligence measures (financial literacy, financial

transparency, financial analysis decision and financial capability) on financial stability of small businesses in Lagos State

#### **1.4 Research Questions**

Based on the specific objectives of the study, the following research question were formulated

- (i) What is the influence of financial intelligence measures (financial literacy, financial transparency, financial analysis decision and financial capability) on revenue generation of small businesses in Lagos State?
- (ii) In what way do financial intelligence measures (financial literacy, financial transparency, financial analysis decision and financial capability) affect financial stability of small businesses in Lagos State?

#### **1.5 Research Hypotheses**

Based on the research questions of the study, the following research hypotheses were formulated:

H<sub>01</sub>: Financial intelligence measures (financial literacy, financial transparency, financial analysis decision and financial capability) have no significant influence on revenue generation of small businesses in Lagos State

H<sub>02</sub>: There is no significant effect of financial intelligence measures (financial literacy, financial transparency, financial analysis decision and financial capability) on financial stability of small businesses in Lagos State

#### **1.6 Scope of the Study**

The study examined the influence of financial intelligence measures (financial literacy, financial transparency, financial analysis decision and financial capability) on small business performance measures on revenue generation and financial stability across five divisions (IBILE) in Lagos State for the business that have been in existence for the past 10 years and complied with SMEDAN definition. It comprises of all business in Lagos state. This State was chosen since it serves as the commercial hub of small businesses in Nigeria (SMEDAN, 2017).

#### **1.7 Significance of the Study**

This study will provide strategic and dynamic information regarding small business finances and how to achieve small business performance as well as to small business policy makers in the area of small business industry in Lagos State, Nigeria. The study will be beneficiary business managers on the key information that helps to stimulate and strategically react towards business financial information in order to enhance small business performance. This is not only beneficial to the business policy makers, but also to the Nigerian economic managers as the small business industry is an important aspect of the nation's economic activities. The study assists small business owners to identify viable source of revenue and financial stability strategies. The study will also be beneficiary to researchers, basis for future stakeholders, government official and

students by contributing to literature.

## 2.0 Literature Review

This sub-chapter focused on conceptual definitions of the study variables, theoretical framework, empirical gap and gap in the literature.

### *Financial Intelligence*

Lagerwaard and De-Goede (2023) defined financial intelligence as the confidence and ability to do anything and be proactive as well as judiciously invest financial resources so as effectively maximized sound return from the funds invested. Money either increases or limits what people can have and do. Financial intelligence is a systematic method to learning about fundamental money management and equipping oneself with the necessary essential abilities to be competent and responsible with money. Competence in money is competence in life and survival, and this is a priceless gift to instill in oneself and loved ones (Financial Intelligence Incorporation, 2020). In this study, financial intelligence could be measured in terms of financial literacy, financial transparency, financial analysis decision and financial capability. Lagerwaard and De-Goede (2023) pointed that in many organizations, financial intelligence has developed as a best practice and core competency, resulting in improved financial and non-financial survival, increased staff morale, and commitment.

### **Financial Literacy (FL)**

Anjani and Darto (2023) defined financial literacy as the combination of awareness, knowledge, abilities, attitudes and actions needed to make economic decisions in order to achieve sound financial well-being and survival in the face of environmental challenges. Financial literacy is defined by the Financial Literacy and Education Commission (2020) as the knowledge, skills, and instruments that enable people to make their own financial decisions and the desired behavior that will help them achieve their goals.

### **Financial Transparency (FT)**

Wanjau, et al (2018) defined financial transparency as divulging necessary financial information in order to eliminate information asymmetry between business stakeholders such as managers, employee and consumers. According to Lapsley and Segato (2019) and Taiwo, Idowu, and Adeneye (2021), financial transparency refers to how a business establishes rules and decisions that are accessible to stakeholders which enhanced accountability from the business owners. Financial transparency enhanced financial reports' thorough and timely disclosure which aids business survival and allows investors to invest wisely since they are better informed about the best capital to use, lowering the cost of financing through a lower liquidity premium (Lapsley & Segato, 2019).

### **Financial Analysis Decision (FAD)**

Ateino (2022) characterized financial analysis choice as a critical step toward achieving financial independence or success in order to meet the financial demand for re-investment. In the

investment process, one must be able to make informed judgments about how and when to invest through financial analysis decision measures (Al Breiki & Nobanee, 2019).

Ateino (2022) went on to say that making decisions based on financial analysis requires looking to the future and emphasizing the aspects of the company that are essential to its existence, particularly its efficiency and safety. Financially, business analysis for managers must comprise an analysis of the financial results, circumstances, and structure as well as any modifications to the financial structure. In this sense, Berthilde and Rusibana (2020) opined that financial analysis decision can be defined as the process of converting data from financial statements into useful information important to management by using various analytical tools and methodologies in order to survive financial constraints caused by environmental turbulence.

### **Financial Capability (FC)**

Xiao, et al (2022) defined financial capability as a business owner ability to apply appropriate financial knowledge and perform desirable financial behaviors for achieving financial well-being and survive environmental turbulence. According to Brown (2020), there are two categories of financial capability: those that recognize an individual's external context, such as systems and institutions, and those that are internally centered, encompassing knowledge, skills, and behavior. Because financial aptitude takes into account both personal skills and outside chances, researchers have supported it. Financial capacity influences decision-making since it relates to efficient management and control of cash (Xiao et al., 2022). The study assume that an individual is familiar with these key financial phrases, then such information can benefit his/her financial decision-making and planning.

### **Business Performance**

Small Business performance is a measure that describes the health of a small business efficiency and effectiveness but also on the environment where the business operates (Onyenma, 2019). Performance may be regarded as a prominent achievement in one specific field of activity. Performance also defines how a person or groups reach a final conclusion to accomplish a goal. Yucesoy and Barabási (2016), defined performance to represent the totality of objectively measurable achievements in a certain domain of activity.

### **Small Business**

Small business is defined by SMEDAN, (2017) as dual criteria of employment and assets (excluding land and buildings). It defines as those whose total assets (excluding land and buildings) are less than Five Million (N5,000,000) Naira with work force not exceeding ten employees.

### **Revenue Generation**

Revenue generation is defined as the gross inflow of cash, receivables, or other consideration coming from a company's typical business operations, which include sales of goods, provision of services, and use of the resources of other organizations that generate interest (Mutua, 2023). Revenue generation is a tool that reflects a company's survival since it is a representation of the

money a business makes when it sells goods or services to its customers (Njagi, 2018). The ability to generate money is derived entirely from the sale of goods and services, and the revenue collected may serve as accurate picture of the real revenue generated which might determine business survival.

### **Financial Stability**

The study defines it as the establishment of a system that can take in all of the economic events, both favorable and unfavorable, which has nothing to do with keeping people or companies from making mistakes, losing money, or prospering. It is only aiding in the establishment of circumstances necessary for the system to continue operating efficiently in the face of such incidents.

## **2.2 Theoretical Framework**

The research makes use of the following theories, Due- Process financial literacy theory, contingency theory, and behaviour theory.

### **Due- Process Financial Literacy Theory**

Lusardi and Mitchell (2011) introduced the theory of dual processes. According to this study, financial literacy may not always result in the best financial judgments because both intuitive and cognitive processes might influence financial decisions. The two types of thinking that are most common among those with high financial literacy may have an impact on how they behave: instinctive behavior (system 1) and reasoning (system 2) (Glaser and Walther, 2014; Lusardi and Mitchell, 2011). The capacity to learn without reasoning or inference is known as intuition. Views, comprehensions, conclusions, or beliefs that are derived from intuition cannot be supported by logic or empirical evidence. According to Chan and Park (2013), citing Taylor (1981), people who rely on intuition tend to use mental shortcuts while making decisions, which are frequently heavily influenced by their emotions. According to Glaser and Walther (2014), a high prevalence of intuition reduces the beneficial impact of financial literacy on rational investment decisions. Consequently, using intuition more often leads to less-than-ideal financial choices. The process through which sensory information is modified, simplified, elaborated, stored, recovered, and used is known as cognition. According to Chan and Park (2013), cognition is the mental processes of understanding, calculating, thinking, solving problems, and making decisions. People with high cognitive abilities are analytical, love thinking, have greater memory retention, and are more willing to look for new information. The dual process theory indicates that those with strong cognitive functions will actively seek out knowledge and are more likely to be persuaded by pertinent messages, which makes it relevant to our study. This suggests that financial literacy training utilizing straightforward, understandable techniques can improve their ability to make decisions. Furthermore, as people prefer to rely on intuition when pertinent information is unavailable, the use of intuition may be decreased by providing relevant information to help decision-making through financial education. However, when people rely on their gut feelings when making decisions, the best outcomes might not be obtained.

### **Behavioural Finance Theory**

In 1979, Thaler, Kahneman, and Tversky were the leading proponents of this theory. Sewell (2007) states that behavioral finance is a school of thinking that affects how employees behave psychologically when handling money and how it affects the performance and survival of the organization. It has a significant impact on cognitive biases and the particular outcomes they have while making decisions. This essentially indicates that while people in behavioral finance are normal, those in traditional finance tend to be more reasonable (Statman, 1999). According to Gilovic, et al (2002), behavioral finance clarifies how and why people decide to save, invest, spend, or borrow money in a reasonable or irrational way. This field is attempting to replace the rational homo economics with a more realistic behavioral medium that is ruled by sentiments and has a greater propensity for biased decision-making, according to Prosad, et al (2015). One comes to realize that some of their errors and decisions are a result of their psychology or human nature when they have a knowledge of behavioral biases. As behavioral finance may be used to explain the reasons behind and methods by which the group members borrow and save money, it serves as the foundation for this study. In terms of women's financial behavior while investing in women's groups, this theory will be useful in identifying the psychological motivations. This theory, which makes small business managers' decision-making processes better and prevents errors, highlights the significance of financial knowledge for managing finances. It is thus appropriate for the study.

### **Contingency Theory**

According to contingency theory, there is no best way to systematize a business and its organizational structure (fielder, 1964). It makes the case that the organizational structure that best suits a certain operating circumstance, such as technology (Woodward 1968 or environment (Burns and Stalker, 1961; Lawrence and Lorsch, 1967), is the most appropriate one. According to Moorthy (2012), contingency theory has been applied extensively in studies aimed at assessing an organization's efficacy and performance. According to Cacciolatti, et al (2011), there is a greater chance of growth for SMEs who effectively utilize their structural marketing information. This supports the findings of Mahmoud (2011) for SMEs in Ghana, which indicated that higher performance levels were associated with increased market orientation. This demonstrates that, as mentioned by Keh and Nguyen (2017), there is a favorable association between information use and the performance of the firm.

## **2.3 Empirical Review and Gap in the Literature**

There have been several related studies reviewed such as; Agyapong, and Attram (2019), Menike (2019), Usama, and Yusoff (2019) and Yakob, Zalila, Yakob, and Hafizuddin-Syah (2021) examine the influence of financial literacy on the performance of small and medium-sized enterprises. The study employed multiple regression and found that financial literacy has a positive and significant impact on small business performance.

Kuzhuvelil and Makesh (2018) did a study directed towards comprehending relation betwixt financial literacy and membership in the groups bank linkage programme. The research adopted



an exploratory research design. The study found out notable differences in financial knowledge between those in the membership and otherwise about current and savings accounts, as well as simple and compound interest. The study was conducted on self-help groups that were linked to a bank programme and included non-members. The impact financial knowledge has on the growth of those groups was also not studied. The current study sought to study members of the women groups and how their financial knowledge influenced the growth of the groups.

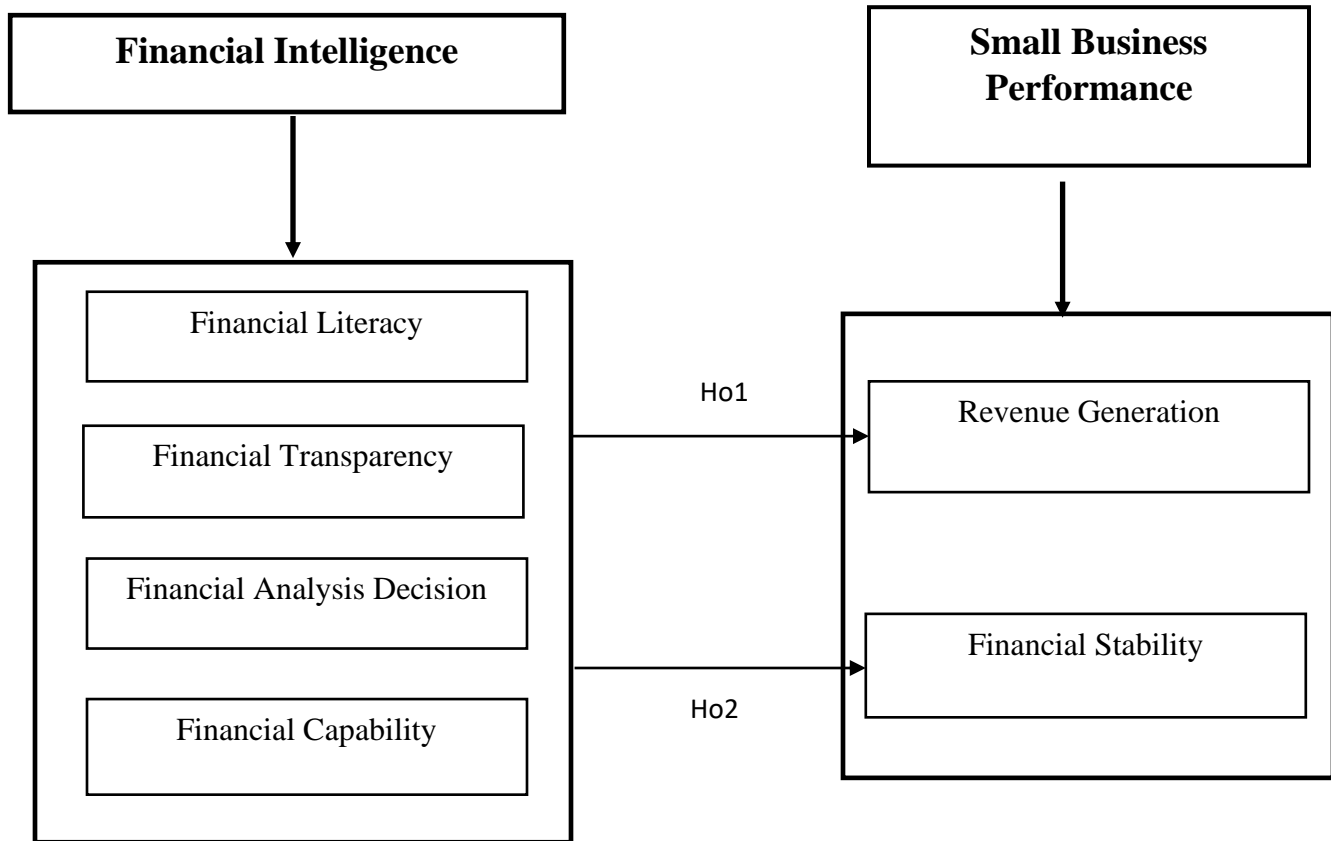
Sudindra and Naidu (2018) conducted a study on financial behaviour and decision-making behaviour among 378 working women in information technology services in Bengaluru. The study utilised a survey research method. Investment, savings, borrowing and spending behaviour had a positive impact on financial behaviour as found in the study. He also discovered that decision making behaviour was positively affected by financial behaviour. The study concluded that financial literacy levels required enhancement amongst the population. The study main concentration was the resultant effect of financial behaviour on decision-making among Indian women, this research sought to address the gap in impact of financial behaviour on women groups growth in Kenya which was not done. Mudzingiri, et al (2018) conducted a study that investigated factors determining financial behaviour among South Africa's university students. The study adopted survey research method. The results showed that students with low financial literacy levels were impatient, loved taking risks, and were overconfident. The study focused on how students' financial behaviour differs based on different financial literacy levels, the current research goal aimed to assess effect of financial behaviour on the growth of JOYWO registered groups.

Setiyani, and Ameliawati (2018) research purposed to discover the influence of financial attitude to the management of finances. The study adopted descriptive research method and data analyzed using path analysis. Study revealed that financial management behaviour was positively influenced by financial attitude. The study focused on influence of financial attitude on the behaviour of managing finances. This present study goal was to discover the effect of financial attitude on the growth of JOYWO registered groups. Odebiyi, et al (2020) studied how financial attitude influenced the small and medium enterprises performance. Descriptive survey design research was adopted. The study findings showed a positive as well as statistically significant relation between financial attitude and SMEs performance. Focus was on SMEs registered in the Lagos business directory. The influence of financial attitude on women groups growth will be examined in this study as it had not been researched.

Although, there exist past related empirical studies aforementioned reviewed on financial literacy, financial knowledge, financial management, financial intelligence, and financial attitude on SMEs performance (Agyapong, & Attram, 2019; Menike, 2019; Usama, & Yusoff, 2019; Yakob, et al 2021; Mudzingiri, et al 2018; Sudindra, 2018; Nzira, 2018; Odebiyi, et al 2020 among others). However, most of these related studies reviewed failed to considered how financial intelligence measures (financial literacy, financial transparency, financial analysis decision and financial capability) on small business performance measures like revenue generation and financial stability in Lagos State. Thus, the empirical gap identified from

literature serves as the motivation for this study.

## 2.4 Conceptual Framework



Source: Adapted Conceptual Model (2024)

The researcher's conceptual model depicted how financial intelligence measures (financial literacy, financial transparency, financial analysis decision and financial capability) affect small business survival measures like revenue generation and market share. The above conceptual model above aligned with specific objectives and hypotheses of the study.

## 3.0 Methodology

The study employed survey research design and the population of the study was 8,395 which serve as the total number of small businesses registered in Lagos State with SMEDAN (2017) and National Association of Small-Scale Enterprises (NASME) (2018). Purposive sampling technique was employed and Cochran (1997) formula was used for sampling size determination. After getting the sample size through Cochran (1997) formula, the study employed convenience sampling across five (5) divisions of Lagos State called IBILE (Ikeja, Badagry, Ikorodu, Lagos Island and Epe) to distribute equal questionnaire to small business owners or managers except for Ikeja division as it serves as the state capital of Lagos.

$$n = \frac{NZ^2pq}{d^2(N-1) + Z^2pq} \dots\dots\dots 3.1$$

Where:

**n** = Sample size

**N** = Population size

**Z** = Standardized normal variable and its value that corresponds to 95 % confidence interval equals 1.96.

**P** = Degree of variability (0.5)

**q** = 1-p

**d** = Degree of accuracy (0.05)

**α** = level of significance (5%)

$$n = \frac{8,395 (1.96)^2 0.5 \times 0.5}{(0.05)^2 (8,395-1) + (1.96)^2 0.5 \times 0.5} = 367$$

The sample size for this study was 367 and the instrument was distributed equally at 73 questionnaires to each division except Ikeja which got 75 questionnaires, this was because Ikeja serve as the Lagos State capital. All instruments administered to five divisions aggregated to 367 questionnaires. The instrument was administered via google form sent to each division associations of small business owners phone numbers registered with NASME in Lagos State.

The adapted instrument was depicted in Table 1 below, the Cronbach’s alpha coefficients of the adapted questionnaire confirming their reliability and validity are shown in Table 1. The adapted questionnaire was therefore adjudged reliable and valid since the Cronbach’s alpha was greater than 0.70 and the Average Variance Explained (AVE) was greater than 0.5 for validity respectively.

**Table 1: Reliability and Validity Results of the Adapted Questionnaire**

Variables	Components of Dependent Variable	Cronbach’s Alpha	AVE	Source of the Instrument
Small Business Performance (Dependent Variable)	Revenue Generation	0.78	0.68	Gbadamosi, Asikhia, Akinlabi and Makinde (2022)
	Financial Stability	0.72	0.52	Gbadamosi et al. (2022)
X = Financial Intelligence (Independent Variable)	Financial Literacy	0.73	0.63	Dewi, Febrian, Effendi, Anwar, and Nidar (2020)
	Financial Transparency	0.72	0.54	Dewi et al. (2020)
	Financial Analysis Decision	0.78	0.62	Dewi et al. (2020)
	Financial Capability	0.84	0.50	Dewi et al. (2020)

**Source:** Researcher’s Compilation from Adapted Questionnaire Reliability and Validity Report (2024)

The Confirmatory Factor Analysis (CFA) is measured based on Kaiser Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett’s Test of Sphericity at 95% and the instrument was regarded as adequate, when the value of KMO is between 0.5 to 1.0 (Hair et al., 2010). For the Bartlett’s Test of Sphericity, small values (less than 0.05) of significance level indicate that the adequate correlation exists to justify factor analysis (Hair et al., 2010). Average Variance Extracted (AVE) greater than 0.5 was treated as evidence of convergent validity. The factor loadings of these items were used to establish the AVE. The results of KMO Measure of Sampling Adequacy, Bartlett’s Test of Sphericity and AVE for the variables are presented in Table 2 which indicated that the data for the study is reliable and valid.

**Table 2: Reliability and Validity Results**

S/N	Variables	No of Original items	No of Retained items	KMO	Bartlett’s test of sphericity	AVE	Cronbach Alpha
1	Revenue Generation	6	6	0.774	89.537(0.000)	0.565	0.719
2	Financial Stability	6	6	0.781	96.989(0.000)	0.643	0.742
3	Financial Literacy	5	5	0.732	71.421(0.000)	0.621	0.891
4	Financial Transparency	5	5	0.853	93.208(0.000)	0.502	0.729
5	Financial Analysis Decision	6	5	0.566	59.244(0.000)	0.513	0.781
6	Financial Capability	5	5	0.536	61.556(0.000)	0.537	0.751

**Source: Researcher’s Computation (2024)**

### Model Specification

For this study, the dependent variable was small business performance measure with revenue generation and financial Stability while the independent variable was financial intelligence measure with financial literacy, financial transparency, financial analysis decision and financial capability. The functional model for the study variables is denoted in the equations below:

$$Y = f(X)$$

Y = Dependent Variable

X = Independent Variable

Y = Small Business Performance (SBP)

X = Financial Intelligence (FI)

$$Y = (y_1, y_2)$$

Where:

Y = Small Business Performance (SBP)

y<sub>1</sub> = Revenue Generation (RG)

$y_2 =$  Financial Stability (FS)  
 $X = (x_1, x_2, x_3, x_4)$   
 Where;  
 $X =$  Financial Intelligence (FI)  
 $x_1 =$  Financial Literacy (FL)  
 $x_2 =$  Financial Transparency (FT)  
 $x_3 =$  Financial Analysis Decision (FAD)  
 $x_4 =$  Financial Capability (FC)

The model formulated for each of the hypotheses are written as

**Hypothesis One**

$y_1 = f(x_1, x_2, x_3, x_4)$   
 $y_1 = f(FL, FT, FAD, FC)$   
 $RG = \beta_0 + \alpha_1FL + \alpha_2FT + \alpha_3FAD + \alpha_4FC + \varepsilon_i$  Eqn 1

**Hypothesis Two**

$y_2 = f(x_1, x_2, x_3, x_4)$   
 $y_2 = f(FL, FT, FAD, FC)$   
 $FS = \beta_0 + \alpha_1FL + \alpha_2FT + \alpha_3FAD + \alpha_4FC + \varepsilon_i$  Eqn 2  
 Where:  
 $\beta_0 =$  Constant in the model  
 $\alpha_1 - \alpha_4 =$  Coefficient of the independent variables for objective one and two  
 $\varepsilon_i =$  error or stochastic terms

**Apriori Expectations**

Based on extant literature, it was expected that there would be a significant and positive effect of financial intelligence components (FL, FT, FAD and FC) on small business performance. The statistical notations for the *apriori* expectations and various relationships between the variables were as follows

**Table 3:** Apriori Expectations of the Hypotheses

Hypotheses	Models	Decision rule
<b>H<sub>01</sub></b>	$RG = \beta_0 + \alpha_1FL + \alpha_2FT + \alpha_3FAD + \alpha_4FC + \varepsilon_i$	Reject if $\alpha_i \neq 0$ ; and $P \leq 0.05$ ; Otherwise, do not reject
<b>H<sub>02</sub></b>	$FS = \beta_0 + \alpha_1FL + \alpha_2FT + \alpha_3FAD + \alpha_4FC + \varepsilon_i$	Reject if $\alpha_i \neq 0$ ; and $P \leq 0.05$ ; Otherwise, do not reject

**Source:** Author’s Computation (2024)

## 4.0 Results and Discussions

The survey distributed 367 questionnaires to small business owners/managers in five divisions (IBILE) in Lagos State. 289 of the 367 copies of the questionnaire provided were correctly filled out and returned. This amounted to 79%. Bell et al. (2022) proposed that a response rate of 50% or above is required to examine the study's results. As a result, a response rate of 79% was deemed perfect retrieval of the administered instrument.

### Data Treatment

Data treatment is compulsory for data generated from survey so as to ensure that all the basic assumptions governing regression were met, the data was submitted to certain pre-diagnostic tests like Normality, linearity, homoscedasticity, and multicollinearity tests.

### Normality Test

**Table 4: Summary of Normality Tests**

Construct	Dimension	Skewness	Kurtosis
Small Business Performance (Y)	y <sub>1</sub> = Revenue Generation (RG)	-1.297	0.712
	y <sub>2</sub> = Financial Stability (FS)	-1.927	0.741
Financial Intelligence (X)	x <sub>1</sub> = Financial Literacy (FL)	1.672	-0.319
	x <sub>2</sub> = Financial Transparency (FT)	-1.276	-0.198
	x <sub>3</sub> = Financial Analysis Decision (FAD)	-1.929	0.989
	x <sub>4</sub> = Financial Capability (FC)	2.899	0.729

### Linearity Test

Independent Variables	Test Results	P-value	Conclusion
x <sub>1</sub> = (FL)	8.679	0.001	Linearity
x <sub>2</sub> = (FT)	5.137	0.000	Linearity
x <sub>3</sub> = (FAD)	24.226	0.002	Linearity
x <sub>4</sub> = (FC)	12.981	0.000	Linearity

### Multicollinearity Test

Explanatory Variables	Tolerance	VIF
x <sub>1</sub> = (FL)	0.415	1.923
x <sub>2</sub> = (FT)	0.202	4.104
x <sub>3</sub> = (FAD)	0.480	2.292
x <sub>4</sub> = (FC)	0.834	3.967

**Source: Author's Computation (2024)**

**Dependent Variables:** Revenue Generation (RG) and Financial Stability (FS)

The normalcy ranges of skewness and kurtosis within the range of -4 to +4 are generally deemed appropriate for determining normality in this study. This lends credence to the idea that these metrics give a reliable assessment of deviations from normalcy. Table 3 summarizes the

normalcy test utilizing kurtosis and skewness tests. According to Tabachnick and Fidell (2001), the skewness and kurtosis values for the variables were determined to be between -4 and +4, which meets the criterion for data to be considered normally distributed and suitable for multiple regression analysis. Also, findings in Table 4 depicted that there exists significant and positive linear connection between the dependent variables (RG and FS) and the sub-variables for independent variable for explanatory variables (Financial Literacy (FL), Financial Transparency (FT), Financial Analysis Decision (FAD) and Financial Capability (FC)) at  $p < 0.05$  significance level. As a result, the linearity assumption was met for the study, and the VIF (Variance Inflation Factor) values for the multicollinearity test were less than 5, showing that there was no substantial issue of multicollinearity among the predictor variables in the model. It is worth noting that while the literature typically considers a VIF score more than 5 to be cause for concern, a threshold of 10 is commonly considered as the upper limit (Menard, 2009). Because the tolerance values were greater than 0.1, the VIF for the variables indicated the absence of multicollinearity between the variables, verifying the absence of multicollinearity.

**Table 5: H<sub>01</sub>: Financial Intelligence components (FL, FT, FAD and FC) have no significant effect on Revenue Generation of small businesses in Lagos State**

N	Model	B	T	Sig.	ANOVA (Sig.)	R	Adj.R <sup>2</sup>	F-stat (4, 284)
289	(Constant)	0.046	2.142	.000	0.001	0.518	0.459	121.384
	x <sub>1</sub> = Financial Literacy (FL)	1.012	3.876	0.020				
	x <sub>2</sub> = Financial Transparency (FT)	1.397	4.619	0.001				
	x <sub>3</sub> = Financial Analysis Decision (FAD)	1.103	8.943	0.011				
	x <sub>4</sub> = Financial Capability (FC)	0.281	1.018	0.061				
a. <b>Dependent Variable:</b> Revenue Generation (RG)@ 5% Level of Significance								

**Source: Researcher's Findings 2024**

From Table 5 above depicted the multiple regression method of analysis of the influence of financial intelligence measures (financial literacy, financial transparency, financial analysis decision and financial capability) on revenue generation of small business performance in Lagos State, Nigeria. The table 5 further shown that financial literacy ( $\beta = 1.012$ ,  $t\text{-stat} = 3.876$ ,  $p < 0.05$ ), financial transparency ( $\beta = 1.397$ ,  $t\text{-stat} = 4.619$ ,  $p < 0.05$ ) and financial analysis decision ( $\beta = 1.103$ ,  $t\text{-stat} = 8.943$ ,  $p < 0.05$ ) have positive and significant effect on revenue generation while financial capability ( $\beta = 0.281$ ,  $t\text{-stat} = 1.018$ ,  $p > 0.05$ ) had positive impact but insignificantly influence revenue generation of small businesses in Lagos State at 5% level of significance. Since the result of p-value is 0.000 which is less than 0.05, hence, the study rejects the null hypothesis which states that Financial Intelligence components have no significant effect on Revenue Generation of small businesses in Lagos State, therefore accept the alternate hypothesis which states that Financial Intelligence components have significant effect on

Revenue Generation of small businesses in Lagos State. The results revealed that financial intelligence measures (financial literacy, financial transparency and financial analysis decision) were significant predictors for revenue generation except for financial capability among small businesses in Lagos State. This implies that sound and effective usage of financial literacy, financial transparency and financial analysis decision play crucial roles in achieving revenue generation of small business in Lagos State.

The coefficient of regression determination ( $Adj.R^2 = 0.459$ ) indicated that about 45.9% of changes that occurs in revenue generation of small businesses during the study period is explained by financial literacy, financial transparency, financial capability and financial analysis decision while the remaining 54.1% changes is accounted for by other variables not include in the study prescriptive model. The results of the prescriptive model revealed that when financial literacy, financial transparency, financial capability and financial analysis decision improved by one-unit, revenue generation will increase by 1.012-unit, 1.397-unit, 0.281 unit and 1.018 unit, thus this insinuates that financial literacy, financial transparency, financial capability and financial analysis decision positively and strongly affects small business performance in Lagos State. The significant which were less than 5% imply that financial literacy, financial transparency and financial analysis decision as predictor used were significant while financial capability was insignificant. The t-values were  $> 1.96$ , hence the value is significant. Furthermore, the results of F-statistics  $(4, 284) = 121.384, p = 0.001 (p < 0.05)$  indicated that the overall model is statistically fit in predicting how financial intelligence measures like financial literacy, financial transparency, financial capability and financial analysis decision strongly modelled small business survival. Therefore, the null hypothesis one ( $H_{01}$ ) which states that financial intelligence measures (financial literacy, financial transparency, financial analysis decision and financial capability) have no significant influence on revenue generation of small businesses in Lagos State was rejected

**Table 6:  $H_{02}$ : Financial Intelligence Measures (FL, FT, FAD and FC) have no significant effect on Financial Stability of small businesses in Lagos State**

N	Model	B	T	Sig.	ANOVA (Sig.)	R	Adj.R <sup>2</sup>	F-stat (4, 362)
289	(Constant)	0.241	2.114	.501	0.001	0.618	0.581	194.104
	x <sub>1</sub> = Financial Literacy (FL)	1.371	8.376	.000				
	x <sub>2</sub> = Financial Transparency (FT)	0.921	8.159	.031				
	x <sub>3</sub> = Financial Analysis Decision (FAD)	1.831	6.733	.000				
	x <sub>4</sub> = Financial Capability (FC)	0.491	2.719	.001				
a. <b>Dependent Variable:</b> Financial Stability (FS)								

Source: Researchers' Findings 2024



From Table 6, shown that the multiple regression analysis of the effect of financial intelligence components (financial literacy, financial transparency, financial analysis decision and financial capability) on financial stability in Lagos State, Nigeria. The table 6, depicted that financial literacy ( $\beta = 1.371$ ,  $t\text{-stat} = 8.376$ ,  $p < 0.05$ ), financial transparency ( $\beta = 0.921$ ,  $t\text{-stat} = 8.159$ ,  $p < 0.05$ ), financial analysis decision ( $\beta = 0.921$ ,  $t\text{-stat} = 6.733$ ,  $p < 0.05$ ) and financial capability ( $\beta = 0.491$ ,  $t\text{-stat} = 2.719$ ,  $p < 0.05$ ) have positive and significant effect on financial stability of small businesses in Lagos State. The results revealed that financial intelligence components (financial literacy, financial transparency, financial analysis decision and financial capability) were significant predictors for financial stability among small businesses in Lagos State. This implied that sound and effective implementation of financial literacy, financial transparency, financial analysis decision and financial capability served as crucial ingredient in achieving financial stability of small businesses in Lagos State.

The coefficient of regression determination ( $\text{Adj.}R^2 = 0.581$ ) indicated that about 58.1% of changes that occurs in financial stability during the study period is explained by financial literacy, financial transparency, financial analysis decision and financial capability while the remaining 41.9% changes is accounted for by other variables not include in the study prescriptive model. The results of the prescriptive model showed that when financial literacy, financial transparency, financial analysis decision and financial capability positively improved by one-unit, market share will increase by 1.371-unit, 0.921-unit, 1.831 unit and 0.491 unit, thus this insinuates that financial literacy, financial transparency, financial analysis decision and financial capability strongly influenced market share of small businesses in Lagos State. The significant which were less than 5% imply that financial literacy, financial transparency, financial analysis decision and financial capability as predictors used were significant and fit to explained market share for small businesses. The t-values were  $> 1.96$ , hence the value is significant. Furthermore, the results of F-statistics ( $F(4, 284) = 194.104$ ,  $p = 0.000$  ( $p < 0.05$ )) indicated that the overall model is statistically in predicting how financial literacy, financial transparency, financial analysis decision and financial capability strongly influence market share. Therefore, the null hypothesis two ( $H_{02}$ ) which states that  $H_{02}$ : Financial intelligence measures (financial literacy, financial transparency, financial analysis decision and financial capability) do not significantly affect financial stability of small businesses in Lagos State

### Discussions of Findings

The study established that financial intelligence measures (financial literacy, financial transparency, financial analysis decision and financial capability) have significant influence on revenue generation and financial stability, thus both null hypotheses were rejected. Though there were several related studies such as Agyapong, & Attram, 2019; Menike, 2019; Usama, & Yusoff, 2019; Yakob, et al 2021; Mudzingiri, Mwamba, & Keyser, 2018; Sudindra, 2018; Nzira, 2018; Odebiyi, et al 2020 among others) supported the finding that financial literacy, financial transparency, financial analysis decision and financial capability significantly affect small business overall performance. Thus, this study rejected both null hypotheses formulated in this study.

## 5.0 Conclusion and Recommendations

### Conclusion

The study focused on how financial intelligence measures such as financial literacy, financial transparency, financial analysis decision and financial capability determine small businesses survival measure like revenue generation and market share among small businesses in Lagos State, Nigeria. Thus, the study concluded that financial intelligence measures like financial literacy, financial transparency, financial analysis decision and financial capability and improve small businesses performance via financial stability, growth and revenue generation in Lagos State, Nigeria.

### Recommendations

Thus, the study recommended that;

- (i) Small business owners or small business managers should effectively embrace financial intelligence measures such as financial literacy, financial transparency, financial analysis decision and financial capability so as to achieve revenue generation which will enhance small business performance in Lagos State
- (ii) Based on the finding for hypothesis two, the study recommended that small business owners or managers should give maximum attention to financial intelligence measures like (financial literacy, financial transparency, financial analysis decision and financial capability) so as to save and project funds to finance its competitive operations against competitors in order to gain financial stability ahead of competitors in the industry.

### Suggestion for further Studies

The study will guide the future researchers in the area of survival and performance of small businesses not only in Lagos state but in Nigeria as a whole and also will prevail them on the basis for importance of financial intelligence as it relates to the business holistically.

### Contribution to knowledge

The study will serve as a policy guidelines and framework for policy makers, such as business owners, managers and entrepreneur of small businesses in Lagos state. Also, assists small business owners to identify viable source of revenue and financial stability strategies. It will also be beneficiary to researchers, basis for future stakeholders, government official and students.

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