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Original Research Article

Effect of Data Gathering and Analysis on Decision-making among Micro, Small and Medium-Sized Enterprises

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Abstract
Data collection is an important process in the management sciences, as it is a very vital step in solving problems and making key decisions. The skills of data gathering and analyses are equally a prerequisite to arriving at an outcome that will be instrumental to solving the problem at hand. The prevailing concern associated with data collection, preservation and availability in Nigeria was a key driver in embarking on this research. The study examines the effects of data gathering on decision-making. The study used an online questionnaire to collate data from 54 selected business owners from a population of 96 businesses at the Badagry central market in Lagos State, Nigeria. Linear regression was used to test the two proposed hypotheses. The study revealed that data collation and analysis using staff (expertise) reports have an insignificant effect on the decision-making of a firm. Also, decision-making has an insignificant effect on business performance. It was therefore recommended that organizations should train and retrain staff on (end-to-end) data processing and usage skills, while the government is advised to make continuous data generation, preservation and availability a national emergency.

Keywords: Data Collection, Data Analysis, Decision-making, Business Performance, Staff -Skill

JEL Classification Code: C44, D91

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INTRODUCTION

The quality of decision made by an organization determines the level of business success that will be achieved. This is one of the reasons why decision-making is an integral part of an organization but the drives for success make decision-making difficult, confusing and nerve racking. The steps involved in decision-making are recognition of a need, decision to change and conscious dedication to implementing the decision. Data serves as a guide for meaningful decision-making for all decision-makers. Data is the track upon which business decisions ought to move. For a firm to compete favourably in any industry, it must recognize the importance of data gathering and data analysis. These will no doubt help to improve the productivity and effectiveness of the business (Houhamdi & Athamena, 2018). Data gathering is the process of collecting and measuring information on variables of interest in an established systematic fashion while data analysis is the process of transforming data into valuable information (Rosalina & Jayanto, 2018). This information is converted into knowledge that will aid the decision-making process. Data-driven decisions are decisions that are made based on the available data, which has been analyzed and interpreted. Data archive in an organization helps in reducing the time an organization spends on data gathering, and speeds up the process of data analysis and decision-making in the organization. This will help in identifying new business opportunities and maintain business competitiveness within the industry (Vera-Baquero & Molloy, 2012). Integrating externally sourced data with internally sourced data has been a major challenge. This is due to the differences in the nature of data sourced from these major sources. While externally sourced data is heterogeneous, internally sourced data are rather homogeneous data. Externally sourced data are heterogeneous in nature because they are sourced from various external sources. These range from an internet search, open data source and offline publications. These make the gathering, aggregation, analysis and evaluation of sourced data very difficult.

The quest for big data gathering by big organizations started unfolding recently. This big data are intra-border and inter-border in nature covering different countries of interest to the organization. The tremendous improvements in information availability, technological progress, and the growth in the use of electronic devices have led to increase in data availability. This has led to the creation of data bank in these big organizations which become a core part of the Decision Support System (DSS). The landscape of the DSS is gradually changing due to the availability of a large amount of information (with different formats) collected from different data sources. Even though some organizations have improved their decision-making process by finding means of exploiting well-structured information. However, despite the recorded improvement in access to data globally, Nigeria is still very backward in data collection, archiving and availability when needed. Recently, the African Heritage Institution, through its Executive Director, (Prof. Ufo-Okeke Uzodike) lamented the difficulty in accessing data in Nigeria and accused the Nigeria Bureau of Statistics (NBS) of hoarding information needed to compile accurate economic data in the country.

STATEMENT OF THE PROBLEM

Zafar, Mohammed, and Yasir (2011) opined that the availability of accurate, valid, reliable, and timely information is a prerequisite for planning and management in any sector. However, according to Udeme (2017), there is currently a lack of timely, reliable data on education through which to effect basic decisions at all levels in the Nigerian system. The unavailability of data is affecting the progress and development of Nigerian key sectors because policymakers, school administrators, school managers and international institutions cannot access current data to plan, design policies and support the development of the country. Ogunode, (2021) submitted that inadequate data is a problem preventing effective educational planning in Nigeria, he concluded that there is a shortage of educational data on all the forms of educational institutions in the country.

This issue is unfortunately not limited to the educational sector, even the business sector which is the economic nerve of the nation still struggles with the problem of data gathering, analysis and taking decisions thereon. The worst among the victims of poor data collection and analysis are the Micro, Small and Medium-sized Enterprises (MSMEs) who incidentally contribute the largest to Nigeria's GDP, according to a recent report from the Nigerian Bureau of Statistics (NBS). Most of these MSMEs do not even know that credible and lucrative business decisions are not just made by loose information sourced on the streets, but based on well-collected, analyzed and interpreted data that are particularly relevant to their respective lines of business.

Another motivating factor for this research is that few studies have been carried out on data gathering and decision-making in Nigeria, hence the gap of insufficient local and indigenous literature still exists in Nigeria.

Owing to the foregoing, this research, among other major objectives, seeks to educate businesses that the most veritable means of growth is through taking well-researched business decisions, and the only way to take these decisions is to collect relevant, timely and accurate data that are skillfully analyzed, appropriately presented and finely executed. The main objectives of the study are to evaluate the effect of data collection and analysis on the decision-making of MSMEs and equally examine the impact of decisions made with analysed data on business performance

LITERATURE REVIEW

Conceptual Framework

Data Gathering

The process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes is called data collection (Kabir 2016). Capturing evidence that will translate through data analysis and interpreted to provide answers to questions that have been posted on a subject matter is the main objective of data collection. Data are either qualitative or quantitative in nature. Qualitative data are non-numerical and descriptive or nominal, they are in words and sentence forms. Qualitative data are majorly generated through in-depth interviews, observation methods and document review (Kothari 2011). While quantitative data are numerical and can be computed mathematically. Quantitative data are generated through structured data collection instruments, experiments/clinical trials, observing and recording well-defined events, using a different kind of sampling method. The results can be easily summarized, compared, and generalized.

Data Classification

Data can be classified into the following based on their sources.

Primary Data

Primary data are data that have not been published before and are collected directly from the respondents. If managed very well, this kind of data is more reliable and authentic because it has not been worked upon and subjected to any form of manipulation by any researcher. The validity of primary data is greater than secondary data. Despite the advantages of primary data, its disadvantages include that the sources for primary data are limited, and at times it is challenging to get data due to either lack of population or absence of cooperation.

Data gathering typically makes use of both quantitative and qualitative methods of collecting information. These are basically the means by which a researcher gathers, analyses and interprets empirical data that are backed by evidence. The quantitative and qualitative methods are discussed below.

Focus Group Interview

Morgan (1996) defined "focus group interview" as a method of gathering data reports in the form of a dialogue. It is a suitable method for "exploratory" and "preliminary" phases when carrying out research. It can stand as an independent research method or be combined with other research methods (Race, Hotch & Packer, 1994).

The focus groups approach in data gathering helps collate background information of the members and aid the selection of the most suitable questions for the group survey (Ryan, Gandha, Culbertson, & Carlson, 2013). But it is not an appropriate method for conducting interviews on delicate matters.

Nevertheless, this survey method is like an interview, as there might be a need for moderator(s) to guide the process and provide participants with instruction and necessary information from the beginning of the group interview (Anthamatten, Brink, Lampe, Greenwood, Kingston & Nigg, 2011).

Observation Method

Observation is the systematic description of the events, behaviours, and artefacts of a social setting, Marshall & Rossman, (1989). Observation has been recognized as an instrument for collecting data since over a century.

Ratner, (2002), recognized two main forms of observation to be participant observation and direct observation. In participant observation, both the observer and the participants are involved in the data collection, while direct observation involves observing objects or people under study, without interacting with them. While DeWalt & DeWalt's (2002) observations are categorized into two, which are covert observation and overt observation.

Questionnaire

A questionnaire is a form containing a set of questions submitted to people to gain statistical information. It provides the questions and structure for an interview or self-completion and provides space for respondent's answers" (Dibb, Simkin, Pride & Ferrell, 2001). Questionnaires are commonly used in the social sciences, humanities, business and government organizations when carrying out research. It aids the gathering of data on natural knowledge acquisition, like every other traditional method of gathering data. Questionnaires aid the collection of data about what people do, what they have, and what they think, know, feel or want. (Marshal, 2002).

The structuring of the questionnaire should satisfy the research question/objectives, must be easy to understand by the respondent and the researcher must have the ability to retrieve, process and integrate information gathered.

Secondary Data

Secondary data are already published data. Such data are collected to study past and current trend of events and also propose future occurrences. It is also used in the review of previous literature. Common sources of secondary data include censuses, Central Bank of Nigeria Statistical bulletin, Data from the Bureau of Statistics, books, records, biographies, newspapers, data archives, internet articles, research articles by other researchers (journals) and databases, etc.

Examples of secondary data are census data, rainfall data, death rate, birth rate etc. Secondary data are very important since it will not always be possible to conduct a new survey that can adequately capture past changes and/or developments all the time.

MODERN SOURCES OF DATA

There are different modern sources which data originate from, this includes social network sites, cloud applications, software, social influencers, data warehouse appliances, public, network technologies, legacy documents, business applications, meteorological data and sensor data (Elyazgi, 2018).

a. **Transactional data**

Transactional data are data that are generated through the aid of statistical analysis, these data are the output of various statistical tools used in statistics. This statistical analysis includes regression analysis and a decision tree. Transactional data involve the use of a model in analyzing past data and predicting the behaviour of dependent variables. Such data are used in predicting sales forecast or level of success of a new product launch. The past data of both dependent and independent variables are known as transactions.

b. **Social media data**

Social media data are data that are generated from different social media channels. Due to the increase in popularity and wide acceptance among the elites, social media is aiding the collection of data in all regions of the world. In the business world, social media helps customers share feedback and complaints. Not only that the sentiments of the consumers are also expressed on social media which helps companies to make production decisions. Data generated from social media aid the collection of viable intelligence about the product and services offered by the competitors, which leads to the promotion of new business ideas and improvement in the business life cycle.

c. **Internet Applications**
The internet helps users to generate high volumes of data. This happens through web searches for products or services and e-commerce. Examples of numerous online e-commerce websites are Amazon, Flipkart, Alibaba, eBay, Paytm, bookmyshow.com and search engines such as Google, Yahoo, Bing, etc.

d. **Data from electronic instruments**
There are numerous electronic media such as smartphones, RFID tags, GPS Sensors, machines connected to networks, scanners, and cameras which generate high volumes of datasets.

DECISION-MAKING

The process of identifying existing alternatives and choosing from alternatives that suit a purpose is referred to as Decision-making. The Decision-making process involves mental and logical reasoning; hence it is a cognitive study (Ahmed., Bwisa & Otieno 2012). Decision-making involves a course of action that is consciously selected based on some criteria that exist for the desired result. Numerous alternatives are considered in decision-making, but the major focus is not on the existing alternatives but on choosing the one that best fits the organization's goals or objectives (Anwar, 2014).

FEATURES OF DECISION-MAKING:

According to Smriti (2015), the features of decision-making are:

Rational Thinking: This is the ability to consider the present situation, access, organize, and analyze available information (data) to arrive at the best decision.

Process: It is the procedure monitored by discussions and perception. It involves a series of steps taken to make the best decision.

Selective: This entails the choice of the finest alternatives among the competing options which have been acknowledged by the decision-maker.

Purposive: This answers the why and what question(s) in relation to the decision taken. Why was the decision taken and what will it achieve?

Positive: This relates to the kind or nature of the decision taken. Is it positive or negative? For instance, Coca-Cola decided not to introduce a new product into the Nigerian market for some years, while its closest rival Bigi kept introducing new flavoured drinks into the Nigerian market.

Commitment: The commitment of the organization to the implementation of the decision taken. Every decision is based on the concept of commitment. How concerned and ready is the management team to achieve the goals behind the decision or is it just mere paperwork?

Evaluation: Evaluating decisions can be carried out in two ways; the management must appraise the choices and should also assess the outcomes of the judgments taken by them.

Also, in the work of Belkacem and Zina (2018), four phases involved in decision-making are identified to include:

i. **Intelligence Phase**: The major objective of this phase is to identify sources of data, collect the data from identified sources and process the data and make the result of the analysis available to the decision-maker.
ii. **Decision Phase**: at this phase, the problem is developed into the model and

analyzed. The steps involved in this phase are.

Planning: This involves the selection and planning of an appropriate model for data analysis.

Data Analysis: This model is applied at this stage.

Interpreting: Interpreting the model outputs.

iii. **Choice Phase**: At this phase, the effect of the selected model in the design phase is evaluated. The solutions and their effects are evaluated, prioritized and the decisions are made.

iv. **Implementation Phase**: at this stage, the decisions made at the choice phase are implemented and feedback are provided for necessary correction.

Theoretical Framework

This study is based on Grounded Theory (GT). GT has been described as a systematic technique in social research. It is a data theory finding methodology which enables a researcher to improve the theoretical details of the entire features of a topic (Martin & Turner, 2014). Grounded theory starts with inductive data, raises helpful approaches of going back and forth between data and analysis, using relative procedures and preserves the interaction and involvement with data and evolving analysis (Charmaz, 2014).

Empirical Review

Decision-making has for a while been considered by the insight and proficiency of decision-makers, but when integrating data into the decision-making process, it may lead to better-informed decisions (Anderson, 2015). This intuitively implies that no matter how expertly a decision maker is, the need to factor in the place of data analysis cannot be overemphasized, as data gathering, analysis and interpretation buttress the knowledge and scope of decision makers.

El Houari, Rhanoui, and El Asri (2015) posited that big data allows an entirely different way of creating awareness in organizations. At the moment, organizations possess the prospect of excelling if they can effectively endeavour to make sense of the newly generated knowledge and therefore obtain value from big data analysis. This opportunity can however only be opened to developed countries where professionals can benefit from their level of preparedness but for developing nations, where there is a low level of awareness, data generation tendencies may be inadequate, and decisions made from them may be insignificant on business performances.

Data analysis has no doubt become a competitive game and the organizations that get it right are strategically positioned against the others it is in this light that Cukier & MayerSchoenberger (2013) submitted that whoever can make this shift will distinguish the winners from the losers in many industries. Basically, for analyzed data to impact decision-making, it must be almost faultlessly generated and the same characteristic must subsist for the decision made to successfully impact business performance.

Nevertheless, Bédier, Bright, Nielsen, & Ogston (2014) explained that it is grossly insufficient to merely run an analysis of data and they concluded that the data have to be efficiently cascaded to all the personnel in the organization in order for it to influence decisions and indeed instil data-driven culture rather than the instinct that is already programmed in the minds of the decision-makers or the decision-making processes. The implication of this position is that data analysis has to be made an important integral part of the decision-making process in an organization and this must be known to everyone, lest top-level management assumes that their knowledge and experience are simply enough to make business decisions. Times are rapidly changing, and organizations have to quickly wake up to this reality.

Schrage (2016) stated that the ultimate role of data processes is essentially about obtaining the right knowledge, for the right people, at the right time, in order to make better decisions. The role of each requirement cannot be wished away, as giving the right knowledge to the wrong people will backfire and so also is giving the right knowledge to the right people at the wrong time. By and large, painstaking efforts should be commissioned to ensure that the processes are without errors.

No doubt, big data has launched with a lot of fascinating promises and its effect on decision-making has been deliberated upon by many scholars, with McAfee & Brynjolfsson (2012) being leaders in the decision-making viewpoint. Nonetheless, because the field of big data is comparatively new and indeed a virgin research arena, further empirical works in definite businesses are considered essential to add more value to the research of what impact big data analysis can have on decision-making.

METHODOLOGY

The design of this study was a descriptive survey and the population consisted of 96 shop owners in Badagry central market, Lagos. Using the stratified random sampling technique, 54 business owners were selected to represent the needed sample size. A self-structured online questionnaire tagged, *data and decision-making scale* formed the instrument for data collection. Items were given to other experts for their comments and suggestions, thus refining the instrument and establishing its validity. Through the test-retest procedure, a reliability estimates of 0.64 was established for the instrument. Participants were reached through their contact numbers and the link to the instrument (questionnaire) was circulated online to the respondents by the researcher. The accruing data were analyzed using frequency counts and simple percentages, while regression was used for the test of hypotheses.

Model Specification

The model relevant to this study is the Improvement Data Model (IDM) and was adopted from the work of Curcin,Woodcock, Poots, Majeed, & Bell (2014), although the researcher modified their specifications in line with this research topic and focus, as well as the variables tested. In order to test the hypotheses and show the relationship between data gathering and decision-making, the model below was therefore formulated to test the two (2) postulated hypotheses.

Model 1

DM = f(DCA,SS)

DM = DCA + SS + α

DM = Decision-making

DCA = Data Collation and Analysis

SS = Staffs Skill

α = Error Term

Model 2

BP = f(DM)

BP = DM + α

BP = Business Performance

DM = Decision-making

α = Error Term

Table 1: Measurement of Variables

N	VARIABLES	DESCRIPTION	MEASUREMENT	SOURCES
	Model 1	**Dependent Variable**		
1	Decision-making	It measures the ability of the organization to make decisions that will aid the performance of the organization.	Measure with item 9 on the questionnaire	Questionnaire
		Independent Variables		
2	Data Collation and Analysis	This variable measures the ability of the organization to collate and analyze data.	Measure with item 5 on the questionnaire	Questionnaire
3	Staff Skills	This measures the ability of the human resources to collate and analyze data	Measure with item 6 on the questionnaire	Questionnaire
	Model 2	**Dependent Variable**		
4	Business Performance	It measures the overall performance of the organization. It is an additive variable that improves customer targeting (item 11), customer loyalty and retention (item 12), increased efficiency (item13), better product design (item 14) & creation of new business model. (1tem 15).	Measure with items 11, 12, 13, 14 & 15 on the questionnaire	Questionnaire
		Independent Variables		
5	Decision-making	It measures the ability of the organization to make decision that will aid the performance of the organization.	Measure with item 9 on the questionnaire	Questionnaire

Source: Author´s Presentation (2021)

RESULTS AND DISCUSSION

HYPOTHESIS ONE: Data Collation and Analysis do not have any effect on Decision-making.

Table 2 Model Summary of Data Collation and Analysis and Staffs Skills on Decision-making.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.319[a]	.101	.020	.32836	2.128

a. Predictors: (Constant), data collation and analysis, Staff Skills.
b. Dependent Variable Decision-making

Table 2 provides the *R* and R^2 values. The *R-value* represents the simple correlation and is 0.319, which indicates a low degree of correlation. The R^2 value indicates how much of the total variation in the dependent variable, decision-making, can be explained by the data collation and analysis and staff skills (independent variables). In this case, 10.1% can be explained, which is very low.

The Durbin-Watson d = 2.128, which is between the two critical values of 1.5 < d < 2.5 and therefore we can assume that there is no first-order linear autocorrelation in the data.

Table 3: ANOVA of Data Collation and Analysis and Staffs Skills on Decision-making

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	.268	2	.134	1.242	.308[b]
1	Residual	2.372	22	.108		
	Total	2.640	24			

a. Dependent Variable: Decision-making.
b. Predictors: (Constant), data collation and analysis, Human Resources.

The next table is the **ANOVA** table, which reports how well the regression equation fits the data (i.e., predicts the dependent variable). This table indicates that the regression model predicts the dependent variable insignificantly. This indicates the statistical insignificance of the regression model that was run. Here, *p* is 0.308, which is higher than 0.05, and indicates that data collation and analysis and staff's skills insignificantly predict the decision-making (i.e., it is a good fit for the data).

Table 4: Coefficients of Data Collation and Analysis and Staffs Skills on Decision-making

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.023	.291		3.515	.002
	Staffs Skill	.279	.205	.279	1.360	.188
	Data collation and analysis	-.186	.182	-.210	-1.023	.318

Dependent Variable: Decision-making

The Coefficients table provides us with the necessary information to predict decision-making from data collation and analysis and staff skills, as well as determine whether data collation and analysis and staff skills contribute significantly to decision-making. The regression equation as:

Decision-making = 1.023 + .279 (DCA) - 0.186(SS)

From the table 4, we conclude that data collection and analysis and staff skills contribute insignificantly to decision-making.

HYPOTHESIS TWO: Decision-making does not have any effect on Business Performance.

Table 5: Model Summary of decision-making on Business Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.510[a]	.260	.228	.65738	1.694

a. Predictors: (Constant), Decision-making
b. Dependent Variable: Business Performance

Table 5 provides the *R* and R^2 values. The *R-value* represents the simple correlation and is 0.510, which indicates a low degree of correlation. The R^2 value indicates how much of the total variation in the dependent variable, business performance, can be explained by the decision-making (independent variable). In this case, 26% can be explained, which is very low.

The Durbin-Watson d = 1.694, which is between the two critical values of $1.5 < d < 2.5$ and therefore we can assume that there is no first-order linear auto-correlation in the data.

Table 6: ANOVA of decision-making on Business Performance

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	3.501	1	3.501	8.100	.009[b]
1	Residual	9.939	23	.432		
	Total	13.440	24			

a. Dependent Variable: Business Performance
b. Predictors: (Constant), Decision-making

The next table is the **ANOVA** table, which reports how well the regression equation fits the data (i.e., predicts the dependent variable). This table indicates that the regression model predicts the dependent variable insignificantly. This indicates the statistical insignificance of the regression model that was run. Here, *p* is 0.009, which is lower than 0.05, and indicates that decision-making insignificantly predicts the business performance (i.e., it is a good fit for the data).

Table 7: Coefficients of decision-making on Business Performance

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.030	.472		8.542	.000
	Decisions Making	1.152	.405	.510	2.846	.009

a. Dependent Variable: Business Performance

The Coefficients table avails us with the required statistics to forecast business performance from decision-making, and equally determine if decision-making contributes significantly to business performance.
The regression equation as:

Business Performance = 4.030 + 1.152DM

From table 7, we conclude that decision-making contributes insignificantly to business performance.

Discussion of Findings
The expectation of this study is to expose the ability of organizations to collate and analyze data while specifically bringing out the ability of staff to effectively analyze and interpret these data. These objectives are envisaged to jointly impact the organizational decision-making on one hand and decisions impacting business performance on the other hand. However, it was discovered that data collation and analysis using staff's skills insignificantly influence decision-making, while decision-making also insignificantly influences business performance.

The findings of this study align with the work of Knatterud (1998) which posits that a key element of quality data assurance is developing rigorous and detailed staffing and teaching plan. Inherent in teachings is the necessity to effectually impress the importance of true data gathering on trainees. The preparation phase is principally essential to speak to the probable issue of staff who may inadvertently digress from the original plan. In essence, the quality of the outcome of research largely depends on the expertise of the staff or the participants in the processes of data collection, analysis and interpretation.

Even though data analysis' methods differ according to various disciplines, to generally avoid errors in data collection and indeed a biased outcome, the golden stage to identifying ideal analytic procedures is at the outset of the investigation and not in the middle of the process or to even start correcting fresh errors noticed in the middle of the research.

According to Smeeton & Goda (2003), "Statistical advice should be obtained at the stage of initial planning of an investigation so that, for example, the method of sampling and design of questionnaire is appropriate". Their findings explained further that the principal goal of analysis is to differentiate between an event occurring as either reflecting a true effect versus a false one. Any bias occurring in the collection of the data, or selection of the method of analysis, will increase the likelihood of drawing a biased inference. Whyte, (2021) also concluded that data quality is the yoke of data integrity. She explained that when data quality is low, it becomes unreliable and will not possess integrity for decision-making and cannot produce good results. She ultimately opined that IT managers must employ the best strategies to ensure the reliability of data collection in government and other organizations.

According to a recent Harvard Business Review, how exactly data can be incorporated into the decision-making process will depend on several factors, such as the business goals, types and quality of data an organization is privy to. The collection and analysis of data have long played an important role in enterprise-level corporations and organizations. But as humanity generates more than 2.5 quintillion bytes of data each day, it's never been easier for businesses of all sizes to collect, analyze, and interpret data into real, actionable insights, which explains why collected data may not impact decision-making and decisions made may not impact business performances.

This position also supports the findings of this study which has the outcome that data collection and analysis insignificantly affect decision-making and decision-making in turn, insignificantly affects business performance.

CONCLUSION AND RECOMMENDATION

From the findings of the research, it was discovered that organizations make use of different sources to collect data, though majorly, these organizations depend on external sources of data collection which include social media and other private organizations that specialize in data collation. Also, these organizations make use of between 61-and 90% of the collated and processed data in decision-making.

Several foreign research works have significant correlations while a few have insignificant correlations on the effect of data gathering on decision-making, however, the findings of this research reveal an insignificant relationship among the tested dependent and independent variables, and this easily aligns the outcome with the earlier identified literature gap that there is insufficient indigenous literature, inadequate guidance on data processing and decision-making to support our businesses, and because it is difficult to fittingly adapt the available foreign literature and (or) solutions to our domestic data gathering problems, this paper, therefore, recommends thus;

1. Research staff must be adequately trained and retrained to ensure the accuracy of data collection, analysis, and interpretation to serve the desired purpose for which an investigation was inaugurated.
2. The government must improve in the areas of data generation, preservation and availability, for continuous research and development, as that is about the veritable way to link the past to the present and indeed predict an economically viable future that is rich in human capital talent and solid infrastructure.

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