

DATA ANALYTICS AND SUSTAINABILITY OF COMMERCIAL BANKS IN SOUTH-SOUTH, NIGERIA.

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ABSTRACT

The study examined the relationship between data analytics and the sustainability of commercial banks in South-South, Nigeria. The study was hinged on the exploratory data analysis theory as the threshold theory basal to the study. The study adopted the explanatory research design, using a cross sectional approach. The target population for this study consisted of all commercial banks in South-South, Nigeria while the accessible population for the study comprised twenty-three (23) commercial banks in South-South, Nigeria. The researcher adopted a census study because of the small size of the study population henceforth; there was no need for sampling. However, six (6) policy makers were drawn from each of the regional offices of commercial banks in South-South, Nigeria that constituted the study respondents. In all, one hundred and ninety-two (192) managers constituted the respondents for the study. One hundred and ninety-two (192) copies of structured questionnaire were administered to the respondent managers while one hundred and eighty (180) copies were retrieved, cleaned and qualified for use. Measures of central tendencies and measures of dispersions were used in analyzing the respondent's demographics. More so, the simple Regression Analysis was used in testing the various hypotheses in order to ascertain the relationship between the predictor variable (Data Analytics) and the criterion variable (Sustainability). The result of the analysis revealed that there is positive and significant relationship between Data Analytics and the sustainability of commercial banks in South-South, Nigeria. Remarkably, sequel to the obtained findings, the researcher concluded that Visual Analytics significantly and positively relates with Sustainability and thus recommended that; data analytics should be adopted and implemented as part of their analytics processes, so as to drive the sustainability of commercial banks in south-south, Nigeria.

Keywords: Data Analytics, Sustainability, Expansion Growth, Patronage and Profitability

INTRODUCTION

Traditionally, business choices have been considered purely as an art, an erudite talent that is acquired over a period of time through experience. It has been so regarded because a variety of individual styles can be observed in the handling and successful solving of common business problems in actual businesses. However, the environment in which management must operate is more complex and fast changing. This calls for driving the art of business processes by scientific and objective methods. A theoretical and methodical business approach to business processes is necessary because today's business environments are far more intricate and heterogeneous than in the past and because the cost of making errors is far too high. Conventional tools are intuitional and judgmental so long as they rely on individual opinions. Common sense may be misleading, and snap judgments may have painful consequences. The conviction of individual opinions is strengthened by using business information analytics to avoid the repercussions of costly errors across the enterprise. Therefore, the business problem can be articulated well by collecting relevant facts, by experimenting with potentially fruitful alternatives, and by implementing disruption.

Most companies are collecting loads of data all the time but, in its raw form, this data does not really mean anything. This is where data analytics comes in. (Justin, 2023) posited that data analytics is the process of analyzing raw data in order to draw out meaningful, actionable insights, which are then used to inform and drive smart business decisions. A data analyst will extract raw data, organize it, and then analyze it, transforming it from incomprehensible numbers into coherent, intelligible information. Having interpreted the data, the data analyst will then pass on their findings in the form of suggestions or recommendations about what

the company's next steps should be. You can think of data analytics as a form of business intelligence, used to solve specific problems and challenges within an organization. It is all about finding patterns in a dataset which can tell you something useful and relevant about a particular area of the business; how certain customer groups behave, for example, or how employees engage with a particular tool. Data analytics helps you to make sense of the past and to predict future trends and behaviours; rather than basing your decisions and strategies on guesswork, you are making informed choices based on what the data is telling you.

According to techtarget.com, Data analytics (DA) is the process of examining data sets to find trends and draw conclusions about the information they contain. Increasingly, data analytics is done with the aid of specialized systems and software. Data analytics technologies and techniques are widely used in commercial industries to enable organizations to make more-informed business decisions. Scientists and researchers also use analytics tools to verify or disprove scientific models, theories and hypotheses. As a term, *data analytics* predominantly refers to an assortment of applications, from basic business intelligence (BI), reporting and online analytical processing (OLAP) to various forms of advanced analytics. In that sense, it is similar in nature to business analytics, another umbrella term for approaches to analyzing data. The difference is that the latter is oriented to business uses, while data analytics has a broader focus. The expansive view of the term is not universal, though: In some cases, people use *data analytics* specifically to mean advanced analytics, treating business intelligence (BI) as a separate category. Decision makers and Commercial banks alike face growing scrutiny, political pressure alongside calls for transparency. Thus, the need to understand that the quest for sustainability is greater than ever, and so is the need to understand the value of visual analytics. According to (Modey & Omunakwe, 2023) decision making is integral to organizational success and it occurs virtually in all function and at all levels in an organization be it lower, middle and upper. The types may vary, but often times, they all pass through the same process. As such, the need for human perception and cognition. This paper therefore examined the relationship between data analytics and the sustainability of commercial banks in South-South, Nigeria.

Underpinning Theory (Exploratory Data Analysis Theory)

Exploratory data analysis (EDA) is an iterative process that allows users to examine a large volume of data quickly and meaningfully to better understand and utilize that data for decision-making. Originally conceptualized by the renowned statistician John Tukey 1977. EDA utilizes statistical calculations and data visualization methods to examine data with an open mind. Contrary to scientific data analysis (also called confirmation data analysis), where the user is analyzing a set of collected data to answer a pre-determined question, the EDA process is a discovery process, where the user gathers information to form a hypothesis that may be tested or explored later on (Bezerra, Silva, Guedes, Silva, Leitão, & Saito, 2019; Selwyn, Henderson, & Chao, 2017). It is a process that allows the user to observe unexpected patterns and consider the impact of those patterns. EDA is an especially useful tool for practitioners due to its more implicit foundational principles namely the fact that EDA is process oriented over theory oriented, is rooted in relatively simple mathematical concepts, and is flexible and iterative in nature (Tukey, 1993). There is no right or wrong way to conduct an EDA process. The key is to keep an open mind and to test different modelling techniques until new information about the data is uncovered. To quote John Tukey, "EDA is an attitude, a state of flexibility, a willingness to look for those things that we believe are not there, as well as those we believe to be there" (Tukey quoted in Jones, 1986). As educators continue to use data to drive decision-making, reflective practitioners should embrace the principles of data science (Bill & Melinda Gates Foundation, 2015; Daniel, 2019).

Researcher and data scientist Vasant Dhar (2013) provides a succinct definition of data science: “data science is the study of the generalizable extraction of knowledge from data. Rather than following traditional research protocols to collect data related to a specific question, data science relies on the analysis of vast quantities of data that are strategically and continually collected by an organization to answer in-the-moment questions. EDA is a safe entry point into data science for practitioners looking to enhance their data use.

LITERATURE REVIEW

Concept of Data Analytics

According to techtarget.com, Data analytics (DA) is the process of examining data sets to find trends and draw conclusions about the information they contain. Increasingly, data analytics is done with the aid of specialized systems and software. Data analytics technologies and techniques are widely used in commercial industries to enable organizations to make more-informed business decisions. Scientists and researchers also use analytics tools to verify or disprove scientific models, theories and hypotheses. As a term, *data analytics* predominantly refers to an assortment of applications, from basic business intelligence (BI), reporting and online analytical processing (OLAP) to various forms of advanced analytics. In that sense, it is similar in nature to business analytics, another umbrella term for approaches to analyzing data. The difference is that the latter is oriented to business uses, while data analytics has a broader focus. The expansive view of the term is not universal, though: In some cases, people use *data analytics* specifically to mean advanced analytics, treating BI as a separate category.

Data analytics initiatives can help businesses increase revenue, improve operational efficiency, optimize marketing campaigns and bolster customer service efforts. Analytics also enable organizations to respond quickly to emerging market trends and gain a competitive edge over business rivals. Depending on the application, the data that is analyzed can consist of either historical records or new information that has been processed for real-time analytics. In addition, it can come from a mix of internal systems and external data sources. At a high level, data analytics methodologies include exploratory data analysis (EDA) and confirmatory data analysis (CDA). EDA aims to find patterns and relationships in data, while CDA applies statistical techniques to determine whether hypotheses about a data set are true or false. EDA is often compared to detective work, while CDA is akin to the work of a judge or jury during a court trial; a distinction first drawn by statistician John W. Tukey in his 1977 *book* Exploratory Data Analysis.

Data analytics can also be separated into quantitative data analysis and qualitative data analysis. The former involves the analysis of numerical data with quantifiable variables. These variables can be compared or measured statistically. The qualitative approach is more interpretive; as it focuses on understanding the content of non-numerical data like text, images, audio and video, as well as common phrases, themes and points of view. At the application level, BI and reporting provide business executives and corporate workers with actionable information about key performance indicators, business operations, customers and more. In the past, data queries and reports typically were created for end users by BI developers who worked in IT. Now, more organizations use self-service BI tools that let executives, business analysts and operational workers run their own ad hoc queries and build reports themselves.

Understanding the Concept of Sustainability

According to Bestman & Sam (2022), the concept of sustainability has gained and attracted lots of attention in recent times, as organizations with its stakeholders are turning their attention towards this critical issue of sustainability that encompasses the economic, environmental and social dimensions of sustainability. Sustainability of businesses has been gaining its rightful recognition and importance as it offers competitive advantage and creates value for organizations, their stakeholders, and society (Bonini & Gorner, 2011). However, according to (Hong, Roh & Wawski, 2012) sustainability has not been fully integrated at the strategic and operational level. Some researchers believe that the main hurdle in operationalization of sustainability in organizations is the lack of maintainable value creation throughout the value chain, because parts of these activities are beyond the control of organizations, such as supply chain. Others argue that it is the lack of practicable frameworks and models which holds back the organizational actors from (holistically) considering sustainability in business decisions (Nawaz & Koc, 2018). The latter is particularly important because existing sustainability management models and frameworks are based on conceptual and theoretical designs. The structure of these models lacks a fundamental practicable approach which limits their use in practice. In order to increase the potential application of existing organizational sustainability models, it is important to integrate the sustainability best-practices within the structure of these models. The reason for this is fairly simple: organizational actors generally prefer 'practical rationale' over 'scholarly intellect. Besides applicability, the integration of theories and practices enables the model/framework developers to understand and address the practical limits of organizations in managing sustainability.

Expansion Growth

In 21st century, developments all around the world spread very fast thanks to the globalization movements and information technologies. These changes and developments force businesses to grow and overtop their competitors. Growth is, in fact, a part of natural process of businesses, yet it has become a necessity in today's conditions of competition. Businesses need to develop new products and services, find new market places and consequently grow. National and international businesses which are currently carrying on their activities need to perform internal and external environmental analysis and determine their growth strategies according to the analyzed data. In this study, alternative growth strategies were examined and objectives and types of these strategies were tried to be explained. Though commercial banks as earlier established, offer substantial improvements to the lives of people by providing employment and contributing to a nation's economy as a whole, there are also numerous benefits to be gained from successfully growing and sustaining businesses, especially in the case of Africa since businesses cannot always remain small but is expected to grow and expand with time. "For small businesses to effectively contribute to the economy, they should be able to evolve into efficient, well organized, technically competent, well managed operations which respond to opportunities and challenges in their environment" UNCHS, 1996 (Ang, 1992). They should be able to provide reliable products with dependable delivery and quality conformity. They should be price competitive and continually improve on performance. They should focus on cost effectiveness, integrated quality action, collective customer responsiveness, information technology management and human resource management" UNCHS, 1996 (Steel & Webster, 1991).

Patronage

Nwiepe & Ateke, 2016 stresses that firms crave customers' patronage because patronage is the bedrock of the continued existence and success of a business. Firms are thus always challenged to contrive initiatives that elicit customers' patronage. It has also been established that caring for current customers is key to securing their continued patronage. Consumers make decisions daily. Sometimes less thought is given to the decision making process, nonetheless, every decision is affected by basic rational and emotional states of being. Consumers initiate and conclude purchase based on the perceived value of the products. Thus, patronage is influenced by psychological principles developed to harness an understanding of needs. Customer patronage is a combination of psychological factors that influence purchase behaviour and these factors are considered important by consumers as yardsticks in determining which firm to patronize. It has been measured by various authors in different dimensions, including store traffic flow; willingness, word of mouth, repeat purchase, customer retention and customer referrals, customer satisfaction and referrals.

Today's highly competitive business landscape requires firms to focus primarily on customer satisfaction, if they seek to win and retain customers' patronage (Nwulu & Asiegbu, 2015). Babin & Darden (1996, as cited in Nwiepe & Ateke, 2016) identified terminal values, lifestyles, social class, and media habits as antecedents to patronage. Engel et al. (1995, as cited in Nwiepe & Ateke, 2016) stated that consumer patronage may be viewed from three perspectives: unplanned buying partially planned buying and fully planned buying; while Nwulu & Asiegbu (2015) suggested that patronage behaviour could be measured through patronage intention, patronage action and repeat patronage. In this study however, we take a one-dimensional view of customer patronage. Customer patronage has been argued to ensue from several personal and social factors. Studies also show that media, product and brand related factors account for customer patronage. A study by Ibok & Etuk (2015) which examined the relationship between brand identity and loyalty of customers of telecommunication firms in Nigeria showed that brand identity had a significant positive relationship with customers' loyalty towards Nigerian telecommunications companies. Similarly, Adiele & Opara (2014) examined the association between corporate image and customer patronage of Nigerian commercial banks. The study found that brand identity had a significant positive relationship with customer patronage of commercial banks. Also, Bozkurt (2017) examined the relationship between brand reputation and customers' loyalty towards hotels in Turkey; and reported that brand reputation had a significant positive relationship with customers' loyalty towards hotels in Turkey. Also, Tandoh (2015) assessed the effect of brand awareness on customer loyalty towards Ghanaian commercial banks. The findings revealed that brand awareness had a significant effect on customer patronage of financial services.

Profitability

Profit maximization is the primary reason behind every organization that is operational; as a result a firm's level of efficiency with her earning is a major determinant of a successful and productive organization. It is therefore necessary to identify the determinant factors of profit. According to Nwinyokpugi & Modey (2019) Profitability of commercial banks is an essential component of organizational productivity, its importance spans through banking firm's productivity to economic stability. At the organizational level, a higher return to a large extent reduces money deposit bank's fragility. At the macro level, increased profitability makes for a sustainable sector that can drive economic growth and development. It is very essential for money deposit banks to investigate into these determinants in order to find appropriate marketing strategies that can induce her level of profitability. There has been a

growing competition among banks as the services offered are mostly similar; consequently, they are required to identify dynamics customers consider to make a choice among different providers in order to boost her profit base.

The morale of employees plays a pivotal role in an organization's profit base, this so because, a motivated and happy workforce contribute immensely to higher organizational productivity which will adversely improve her profit base. Employee wellness is indicated as the underlying factor in morale and that internal and external environments affect morale. For example, financial concerns of employees outside of work can affect productivity. Research also revealed that worker stress results in lower productivity such as absences, tardiness, leaving early, mistakes, and lack of concentration. Employees often become the front line since they are responsible for the services rendered by money deposit banks. Unhappy employees can make for unhappy customers and in this age of intense competition, customer loyalty is a great financial value that must be maintained in the long run to grow profits. (Voges, 2003) Morale is the key to developing and fully capturing human potential and channelling this energy toward productivity. Morale is a key factor of employee motivation and is defined as the state of the spirits of a person or group as exhibited by confidence, cheerfulness, discipline, and willingness to perform assigned tasks. The performance of these tasks is directly related to productivity which in turn is directly related to profit.

METHODS

The study population consisted of all registered and functional commercial banks in South-South, Nigeria, while the accessible population for the study comprised twenty three (23) commercial banks in South-South, Nigeria. The researcher adopted the entire population (census) as the sample size considering the fact that the study population is not large. However, six (6) policy makers were drawn from each of the twenty three commercial banks in each state that constituted the study population. Preliminary investigation revealed that there are six most important leadership positions in these commercial banks. Specifically, the study respondents include: Regional Managers, Operations Managers, Research and Development Managers, Marketing Manager, Head of Customer Service, and Head of IT. In all, one hundred and ninety two (192) managers constituted the respondents for the study. That is, six of the States in South -South Nigeria received thirty two copies of the questionnaire each. The study used structured-close ended questionnaire as a means of generating primary data from the respondents of the study. The validity of the instrument was determined by the team of supervisors and other experts in measurement and evaluation studies. Reliability in this study was determined using the Cronbach's Alpha coefficient with the aid of SPSS version 23. One hundred and ninety (192) copies of structured questionnaire were administered to the respondent policy makers while one hundred and eighty (180) copies were retrieved, cleaned and qualified for use. Measures of central tendencies and measures of dispersions were used in analyzing the respondent's demographics. More so, the simple Regression Analysis was used in testing the various hypotheses in order to ascertain the influence of the predictor variable (Data Analytics) on the criterion variable (Sustainability). The result of the analysis revealed that there is a positive and significant relationship between data analytics and the sustainability of commercial banks in South-South, Nigeria.

Table 1: Reliability Coefficients of Variable Measures

S/No	Dimensions/Measures of the study variable	Number of items	Cronbach's Alpha	Comment
1	Data Analytics	5	0.823	Reliable
2	Expansion Growth	5	0.890	Reliable
3	Patronage	5	0.783	Reliable
4	Profitability	5	0.827	Reliable

Source: SPSS Output, 2024

RESULTS

Data Analytics and Sustainability Measures

Table 2 shows the result of correlation matrix obtained for data analytics and sustainability measures. Also displayed in the table is the statistical test of significance (p - value), which enables us to answer our research question and generalize our findings to the study population.

Table 2: Correlations for Data Analytics and Sustainability Measures

		Data Analytics	Expansion Growth	Patronage	Profitability
Spearman's rho	Data Analytics	Correlation Coefficient	1.000	.855**	.719**
		Sig. (2-tailed)	.	.000	.000
		N	180	180	180
	Expansion Growth	Correlation Coefficient	.855**	1.000	.902**
		Sig. (2-tailed)	.000	.	.000
		N	180	180	180
	Patronage	Correlation Coefficient	.719**	.902**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	180	180	180
	Profitability	Correlation Coefficient	.795**	.677**	.654**
		Sig. (2-tailed)	.000	.000	.000
		N	180	180	180

** . Correlation is significant at the 0.01 level (2-tailed).

Source: Research survey, 2024.

RQ1: To what extent does data analytics relates to the sustainability of commercial banks in South-South, Nigeria?

The correlation coefficient (rho) result in table 2 was used to answer research question 1. Table 2 shows a Spearman Rank Order Correlation Coefficient (rho) of 0.855 on the relationship between data analytics and expansion growth. This value implies that a very strong relationship exists between the variables. The direction of the relationship indicates that the correlation is positive; implying that an increase in expansion growth was as a result

of the adoption of data analytics. Therefore, there is a very strong positive correlation between data analytics and expansion growth of commercial banks in South-South, Nigeria.

Similarly, Table 2 shows a Spearman Rank Order Correlation Coefficient (ρ) of 0.719 on the relationship between data analytics and patronage. This value implies that a strong relationship exists between the variables. The direction of the relationship indicates that the correlation is positive; implying that an increase in patronage was as a result of the adoption of data analytics. Therefore, there is a strong positive correlation between data analytics and patronage of commercial banks in South-South, Nigeria.

Furthermore, Table 2 shows a Spearman Rank Order Correlation Coefficient (ρ) of 0.795 on the relationship between data analytics and profitability. This value implies that a strong relationship exists between the variables. The direction of the relationship indicates that the correlation is positive; implying that an increase in profitability was as a result of the adoption of data analytics. Therefore, there is a strong positive correlation between data analytics and profitability of commercial banks in South-South, Nigeria.

Therefore, to enable us accept or reject hypotheses 1, 2 and 3 as well as generalize our findings to the study population the p- value was used as shown below:

H₀₁: There is no significant relationship between data analytics and expansion growth of commercial banks in South-South, Nigeria.

Similarly displayed in the table 2 is the statistical test of significance (p-value) which makes possible the generalization of our findings to the study population. From the result obtained from table 2, the sig- calculated is less than significant level ($p = 0.000 < 0.05$). Therefore, based on this finding the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between data analytics and expansion growth of commercial banks in South-South, Nigeria.

H₀₂: There is no significant relationship between data analytics and patronage of commercial banks in South-South, Nigeria.

Also displayed in the table 2 is the statistical test of significance (p-value) which makes possible the generalization of our findings to the study population. From the result obtained from table 2, the sig- calculated is less than significant level ($p = 0.000 < 0.05$). Therefore, based on this finding the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between data analytics and patronage of commercial banks in South-South, Nigeria.

H₀₃: There is no significant relationship between data analytics and profitability of commercial banks in South-South, Nigeria.

Also displayed in the table 2 is the statistical test of significance (p-value) which makes possible the generalization of our findings to the study population. From the result obtained from table 2, the sig- calculated is less than significant level ($p = 0.000 < 0.05$). Therefore, based on this finding the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between data analytics and profitability of commercial banks in South-South, Nigeria.

Therefore, the results for the first set of hypotheses with regards to the relationship between data analytics and sustainability measures are stated as follows:

- i. There is a very strong positive significant relationship between data analytics and expansion growth of commercial banks in South-South, Nigeria.

- ii. There is a strong positive significant relationship between data analytics and patronage of commercial banks in South-South, Nigeria.
- iii. There is a strong positive significant relationship between data analytics and profitability of commercial banks in South-South, Nigeria.

FINDINGS

The findings showed that there is a strong positive significant relationship between data analytics and the sustainability of commercial banks in South-South, Nigeria. This finding corroborates with Bersin (2013) who found that through the use of analytics, Maersk Drilling, an offshore drilling company as reported by Rasmussen and Ulrich (2015) decided to double the resource allocation towards their trainee program due to the strategic implications of the program as it increased their return on investment. Analytics was used as a change management process that helped to achieve those results for business impact. Also, Google through their People and Innovations Lab (PiLab) used analytics to identify four segments of managers and how their behaviour characteristics affected the organisation's management practices.

These findings corroborate with Ejo-Orusa and Okwakpam (2018) who carried out a study on predictive HR analytics and human resource management amongst human resource management practitioners in Port Harcourt, Nigeria and their finding revealed that there is a significant positive relationship between PHRA and the HRM practices used for the study. Based on the findings, it can be concluded that PHRA is an important factor in enhancing the HRM practice outcomes which subsequently increases sustainability of organizations.

These findings corroborate with Boudreau and Lawler III (2009) who averred the advent of analytics has increased the scope of making the HR function as a strategic partner. This is as a result of the HR departments using prescriptive analytics being able to combine the humungous data on employees extracted to improve on the bottom line (Soumyasanto, 2016) and to achieve competitive advantage (Davenport, *et al.*, 2010) and enabled the HR function to add value to businesses (Boudreau, Lawler III & Levenson, 2004). The resultant effect has been increased organisational outcomes measured as customer, financial, learning and growth, and internal operations as established against short-term and long-term goals (Kaplan & Norton, 2007).

Furthermore, Nair (2014) highlights the initiatives of forward-looking firms in using analytics to assess employee productivity and improve hiring and retention processes. Biogen's employee strategy and analytics team, for example, utilizes predictive methodology to understand attrition and recruitment patterns. Similarly, the adoption of analytics in recruitment processes minimizes errors in selecting suitable candidates for roles, as noted by Stone (2002).

This current finding comes to confirm the study by Sharma and Sharma (2017) to draw a causal link between HR analytics and performance using appraisal systems. It was purported that, there is increased objectivity and accuracy in the appraisal process. This robust data analysis tools utilised are reducing the subjective bias that comes with traditional performance systems that existed. More objectivity, fairness and not feel they have been treated unfairly because discussions on performance will be based on performance management data. Furthermore, the finding also supports the finding of Grillo and Hackett (2015) who found out that organisations have improved on how to retain their talents or top performers because HR practitioners and managers are able to determine the rate and probability of an employee leaving the organisation within a specific period of time. This has

become possible through the attrition scores generated from the analytics run within the HR function. Firms have been able to design equitable reward systems after analysing employee's performance ratings with the resultant effect of increased employee retention. Considerable attention has been paid to employee turnover and how to retain key talents because of what the organisation loses in terms of skills and competence shortage within a particular period. Organisation that analyses their attrition data are better able to gather information about why people leave the firm and find ways of dealing with the issues to retain other top performers from turning over.

The finding is in line with the study conducted by Malisetty, Archana and Kumari (2017) who found that, attrition can be reduced using analytics by analysing an organisation employee data as well as attrition records. It was expounded that, monitoring and controlling attrition is one of the key areas the human resource function can add value. Organisation in curtailing employee attrition are running employee surveys once in a year or twice a year to solicit for employees view on how the firm's culture is impacting their performance. The analysed data has revealed insights on the salary, development opportunities such as learning and growth, and job ethics and values which is used to improve on the job environment and to make the employee more engaged. This indirectly motivates them to stay. As employee retention and engagement has become a topmost priority in organisations today has called for deep analytics in these areas to study employee experience trends for optimization and to continuously retain the best talent (Mukundan, 2017; Waxer, 2013; Ruohonen, 2015). Fitzenz and Mattox (2014) have also reported similar findings to say that, if attrition is kept at bay or eradicated, firms are sure to save millions of dollars averagely.

CONCLUSION/RECOMMENDATION

This study examined the relationship between data analytics and the sustainability of commercial banks in South-South, Nigeria. Data analytics (predictor variable) was tested against the proxies of sustainability (criterion variable) expansion growth, patronage and profitability. The hypotheses were tested using the Simple Regression Analysis. The tests were carried out at a 95% confidence interval and a 0.05 level of significance. The major findings revealed that there is a positive and strong relationship between data analytics and the sustainability of commercial banks in South-South, Nigeria. Based on discussion and conclusion drawn; it was recommended that;

- i. Management of commercial banks should adopt and implement data analytics as part of their business analytics processes so as to drive the sustainability of commercial banks in South-South, Nigeria.

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