MANAGEMENT & ACCOUNTING REVIEW

C O N T E N T S

Adoption of Balanced Scorecard and Non-Financial Performance of Tertiary Institutions in Nigeria

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ABSTRACT

The gap existing in the developing countries on whether adoption of BSC a significant influence on non-financial performance of tertiary institutions in Nigeria has using employers' rating as a measure of performance, necessitated this study. The study used a survey research design. The population of the study consisted of all the sixty-eight (68) tertiary institutions in South Western Nigeria which comprised publicly and privately owned universities and polytechnics where a sample of 34 institutions were drawn using the multistage sampling technique. Data was collected using a five-point likert scale questionnaire from 209 respondents purposively drawn from the various categories of staff of the institutions selected. Data were analyzed using descriptive and inferential statistics. The results revealed that there is a significant improvement in the performance of tertiary institutions in Nigeria after adoption of the balanced scorecard. Also, we reported that about 63% of the variation in the ways in which graduates of Nigerian institutions are rated by the employers are associated with the combined effects of all the four components of the balanced scorecard investigated in this study. This research concluded that the balanced scorecard has a significant positive effect on the performance of tertiary institutions in Nigeria.

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INTRODUCTION

Over the years, models and approaches to quality improvement such as quality management, continuous improvement and European Foundation for Quality Management (EFQM) model have been accepted and used in various institutions across the globe to boost the performance of tertiary institutions (Davis & Albright, 2004). Strategic planning and the balanced scorecard (BSC) models are also among the approaches and models which deal with the planning and performance measurement of organizations but these models have not been frequently used (Crabtree, &DeBusk, 2008). The integration of strategy has moved from the regular one-dimensional principle of performance assessment to a multi-dimensional one associated with the major accomplishment factors for all levels of the organization (Hoque, &James, 2000; Davis & Albright, 2004).

Both indicators of non-financial perspectives such as customer perspective, internal business process perspective and innovation and learning perspectives and those of the financial perspective are embedded in the BSC system. The aforementioned perspectives bring into line the vision and strategies as one. Based on this, it serves as a new performance tool that evaluates performance on the basis of objectives. The perspectives as a whole serve as driving forces for future prospects. James (2009) posited that the BSC is widely accepted because it integrates business organization's strategies, framework and vision, while transforming its long-term strategies and objectives (e.g., unfolding customer's value) into tangible actions either internally or externally (Ittner, Larcker&Randall, 2003).

According to Ittner, Larcker and Randall, (2003), the BSC has been developed through three generations (versions). The first generation of BSC introduced four perspectives: financial, learning and growth, internal process, and customer perspectives. In this version, companies use specific multi-dimensional perspectives for strategic performance measurement that combines financial and non-financial strategic measures. As such, companies should assign goals and measures for each perspective. In the second generation, championed by Sinha, (2006), organizations should be able to link the multidimensional perspectives of the first generation with the strategy of the business. In other words, the relationship between the BSC perspectives should take a cause and effect shape. In this generation,

organizations should show how perspectives influence each other. In the third generation, the BSC considers the importance of incentives (Chhaparia, 2006). Thus, this generation implements a strategy by defining objectives, outcomes of action plans, and also links the BSC with incentives. In other words, the strategic map of a particular firm should include the incentive system that links the performance of the business strategy with the employees' incentives.

Ever since the BSC came into existence, the attention of all and sundry has been drawn to research on what it tends to offer as far as performance measurement is concerned. The indispensable qualities of the five perspectives of business administration (production, marketing, human resources, information and finance) coupled with ability to assist companies accomplish missions, implement strategies and achieve objectives portrayed by the BSC made it to be recognized as one of the popular management tools in the business entity (Kaplan & Norton, 1996; Sinha, 2006). Based on this, the BSC is seen as a strategic tool provided to overcome the shortcoming of previous methods for performance measurement. Clearly, little of such is practiced in educational institutions. In Higher education, as opposed to the corporate world, the prevalence is still the traditional practice relative to the measurement of excellence.

As posited by Zairi, and Jarrar, (2000), instead of emphasizing primarily on financial measures, higher education has historically depended on academic measures which fail to present a comprehensive image of the current status of a higher institution. Neither do they reflect some of the key success factors of a higher institution, nor are they capable of capturing many of the dimensions of a higher institution's mission, vision, and strategic directions. This implies that the need to measure organizational efficiency holistically remains validly, essential at least for a reason; that the stakeholders need to uncover whether or not the organization is fulfilling its purpose. Clearly, there are a number of reasons for measuring the performance of an organization. Michalska (2005), indicates in his survey that accountants discovered the justification for performance measurement to include: provision of components of checks and balances that encourage efficiency in performance, staff communication, productivity and achievement of set targets, ascertaining that the right people are sent to the right places working together to achieve a common known goal and

objectives, observe trend in business, establishing what is working and what is not and to set apart performer from non-performer for remuneration and reward purpose.

The BSC as an information based strategic management tool is capable of removing the limitations associated with the traditional measures for evaluating the current status of a higher education institution. This study therefore endeavoured to examine the impact of adoption of the BSC on the measurement of performance of tertiary institutions in Nigeria.The rest of the paper flows as follows: section two covers the review of literature; research methodology is discussed in the third section. Section four and five cover the results and discussion and conclusion respectively.

LITERATURE REVIEW

Conceptual Review

Balanced Scorecard

The BSC is an integrated strategic planning and performance management tool that is used broadly in business, industry, government, and non-profit organizations globally to align all undertakings of the organization to its prospects and tactics, advance communications within and without and measure the actual result with the strategic goals (Pietrzak, 2014). This form of performance measurement, developed by Kaplan and Norton, (1990) complements the conventional financial metrics with non-financial performance measures to give executives and managers a vivid 'balanced' outlook of the performance of an organization.

The BSC approach as stated by Kaplan and Norton (1992) aims to translate strategy into operational action using a coherent set of performance measures and its benefits are that it is based on a 'balanced' set of performance indicators covering the entirety of an organization's mission and goals, rather than just financial indicators. Some metrics are to be consistent with the strategy of the organization, and a manager is to be held responsible for the outcomes in his/her unit or department. Concisely, the BSC is in line with specific and general organizational objectives, responsibility centres, stress management, and in numerous instances, serve as the basis for the

allocation of budgets (Porter & Kramer, 2011). Rewards are given to those departments that achieve pre-set specific and organizational goals; while those that do not meet the goals are not.

Financial Metrics

This is considered as the most essential perspective, of the four perspectives, for major strategy implementation and assessment of performance of organizations. Based on this, it is the ultimate component of the BSC. Niven (2008) exclaimed that the financial perspective can be applied when the mission and vision statements of the organizations are obtainable and the financial issues can be converted into sustainable goals and minimal costs. With this, the financial perspective will be a useful tool for elevating long-term stakeholders' values, minimizing costs and promoting the market value. This claim was supported by Spender (2014) when he stated that the financial perspective entails financial strategic objectives and financial performance measures that give proof of whether or not the company's financial strategy is bringing forth higher profitability and reduced costs.

Customer Metrics

To have a better understanding of this perspective, two measurement standards as identified by Kaplan and Norton (1992a) are highly crucial. The Core Measure Group is the first one. The Core Measure entails the satisfaction, acquisition, retention and profitability of customers coupled with market share. This performance driver gives direction to the organization about customer value position which involves quality, lead times, product quantity and features, relationship and image. All these can only be achieved only by having the right set of customers with the highest propositions of value (Kaplan & Norton, 2001a).

Internal Business Process Metrics

Fernando, Coonghe, Gunathilaka, and Gunawardana, (2016) and Kaplan and Norton (2001) expressed that entities ought to keep on conducting advancement in items, administrations and interior procedures for the formation of more client esteem. The step towards progress guided by the essential needs of the clients are found in four significant procedures; they are: recognition of open windows for new products and services, handling research and development responsibilities, mapping out and

developing novel products and services, transmitting new products and services to where it will be sold or needed. Thus, the internal business process can be said to be a store network which creates value to clients.

Learning and Growth Metrics

Learning and growth are both noteworthy elements that each entity's system ought to consolidate. According to Sunny, Dadang, Eyesan, and Enakirerhil (2016), this perspective entails the acknowledgement of how the establishment can realize its dreams and support its capacity to alter and make strides. There are different drivers and intangible resources that can be utilized to delineate these features. Thus, the institution must make use of a measurement technique that they need rather than the management technique they have. According to Mohammed and Sirajo (2015), the significance of the leaning and growth perspective is determined by the capacity of the organizational employees, capital and information framework, and the manner in which they can add value to the organization. People capital endeavors to underscore the venture on workers of the organization who are in charge of basic internal processes to accomplish a phenomenal level (Niazi, 2006). The information capital supplements the framework and methodology to enhance people capital performance.

Concept of Performance

The idea of performance is utilized all over the place and concerns everything. PC geeks, Car buffs, customer backers, sports fans, individuals or gatherings carrying out bench marking, supervisors, business analysts, People Capital personnel are all characterizing and looking at parts of necessary focus execution and genuine execution conveyed (Szigeti & Davis, 2005). They also recognized two main qualities of the concept of performance - The use of two languages, one for the interest of the performance and the other for the supply of the performance; secondly, the essence of justification and authentication of outcomes against performance goals. Based on the above view, the concept of performance is easy. Be that as it may, truth be told, because of various potential clients of execution proof with various points, execution is a multifaceted term which includes an assortment of implications, that makes it very hard to provide a correct meaning for execution.

Empirical Review

The inquisitiveness to proffer lasting panacea to the ever-skyrocketing performance measurement tool puzzle in the educational sector has given spur to increasing the debate on the adoption of the BSC as a measurement tool.

Edmonds and Tsay (2000) express that managerial performance can be measured by looking at the working consequences of the appointed duty focus with built up norms or with the aftereffects of the allotted obligation focuses with the entity. One method for assessing managerial performance is to contrast standard sum and real outcomes. The adaptable spending plan can be utilized for arranging and performance assessment. For example, administrators might have the capacity to assess the ampleness of the organization's money position by expecting diverse levels of movement. So also, the quantity of representatives, the measures of materials, and the vital hardware and storerooms can be assessed for an assortment of various potential movement levels (Edmonds &Tsay, 2000).Tapions, Dyson, and Meadows (2005) presented the alignment between an organizational strategy and performance measurement at Warwick University (UK), where the BSC applies to Hospitality Services.

Papenhausen and Einstein (2006) underlined that successful BSC implementation requires active contributions from everyone in the organization. Papenhausen and Einstein noted an example from College of Business at the University of Massachusetts – Dartmouth (U.S.A.). As expressed by the claim to fame writing, a convention of utilizing the BSC was set up in the Anglo-Saxon Universities. Fruitful cases in this thought are the Universities from the USA, Australia, Finland and Spain. Bond University, Australia has built up a corporate BSC which concentrates on, and screens, four viewpoints: Customer, Financial, Internal Business and Innovation and Learning. Bond's BSC deciphers the University's central goal and objectives into an arrangement of destinations, measures and focuses in the over four points of view. Through the BSC the University means to screen both ebb and flow execution and its endeavors to give educating, learning and research exercises of the most astounding quality, enhance client administrations, streamline scratch forms, give a situation in which its workers are propelled and created, and upgrade data frameworks (Cribb

& Hogan, 2006).As for the training area, Papenhausen and Einstein (2006) analyzed how the BSC could be made suitable under advanced education settings by adjusting a wide assortment of measures with procedures.

In the observation of Chen (2006) about the Taiwanese higher education sector, it was suggested that certain qualified performance measure indicators (PMI) could be set upon higher education so that all staff members understand the orientation of the BSC in fulfilling their tasks. For instance, tuition income, education promotion rewards and business donations can be PMI for financial perspective. Students' feedback and participation in public charity activities can be PMI from the stakeholders' perspective.Asan and Tanyas (2007) connected the BSC and the Hoshin Kanri tool for strategic management to monitor an Engineering Management Graduate Program. Umashankar and Dutta (2007) discuss in what way the BSC approach may be applied to higher education in India. Juhl and Christensen (2008) presented the BSC concept to analyze the set of performance measures proposed by the Ministry of Science to allocate resources among Danish Universities. Another example from the U.S.A. was described by McDevitt Giapponi, & Solomon (2008) (University Division, Connecticut). The authors described the process and benefits of developing a custom BSC to revitalize a faculty strategy. Sheng, Xiong, & Su (2008) looks at the results of a study that found that most Chinese firms have utilized non-financial related performance measures to keep up an upper hand. Thompson and Thompson & Mathys (2008) advocate the use of an Aligned Balanced Scorecard as a way to upgrade the scorecard approach to enhance authority adequacy as an instrument for growing superior administration systems.

Owusu (2010) inspected the financial related performance of Ghana Breweries limited after merger and selection on the Ghana Stock Exchange. The review went for evaluating the gainfulness level of Ghana Brewery Ltd (GBL), its dissolvability and liquidity position; the adequacy and proficiency of the utilization of proprietors and banks subsidize and the fittingness of blend of obligation and proprietor's value in financing its operations. The discovering demonstrates that notwithstanding the serious assault from less expensive brands on its items and the negative financial condition that took after the merger, the organization's execution over the period under review was acceptable. In any case, the expansion in net turnover, working benefit before remote trade misfortunes declined from 6.97 billion in 2000 to 02.94

billion in 2001; yet enhanced altogether to 06.3 billion in 2002 therefore of the $5 million store against shares paid by Heineken in December 2002. Likewise, Atkinson (2006) uncovered the pertinence of utilizing BSC in non-benefit associations that are driven by their special partners' interests and desires. Particular non-financial related performance measures are basic to drive conveyance of value administrations that are economical to these associations' future development and advancement. Given the particular scope of partners in third-area associations.It is additionally investigated by Zangoueinez had and Moshabaki (2011) that colleges could utilize a learning based approach in measuring their performance in view of a BSC structure.

As Taylor and Baines (2012) noticed, the universities in the UK have become increasingly concerned with the performance management in recent years. Those organizations began to use methods for performance management development in business and industry. For example, the BSC model was used by top management as a means of enhancing their learning on the institution's strengths and weaknesses. In the work of Schobel and Scholey (2012), it was discovered that once an institution's financial strategy is clearly defined and purposely implemented to focus on the educational outcomes, it will translate into overall success of the academic institution. Azizi, Behzadian and Afshari (2012) in a detailed review studied on which perspectives in the BSC are appropriate for the universities. They conducted an extensive survey on the different perspectives adopted by a number of universities and higher education institutes around the world. They indicated that universities and higher education institutions as non-profit organizations are able to apply four main perspectives of the BSC by replacing the customer perspective with the financial perspective at top of the scorecard.

Kairu, Wafula, Okaka, Odera & Akerele (2013) investigated the effects of the BSC on performance of firms in the service sector. The study considered Kenya, a developing economy. It was revealed through the research work that non-financial criteria are as important as financial criteria in measurement systems and when both measures are integrated in the system, they lead to superior results. Moxham (2013) revealed that there ought to be a reason for assurance of their particular performance measures which may not be institutionalized. It is additionally noticed that such performance measures in third-division associations ought to address

three principle territories, in particular responsibility, authenticity, and in addition change of productivity and adequacy (Moxham, 2013).

Myroslava (2014) conducted a research which focused on the comparative content analysis of the BSCs of one Austrian and three German higher education institutions – Johanes Gutenberg University Mainz, Münster University of Applied Sciences (Fachhochschule Münster), Cologne University of Applied Sciences (Fachhochschule Köln), Montan University Leoben. In his study, it was discovered that the BCS provides a systemic view on the strategy of higher education institutions and ensures a full complex framework for implementation and controlling of the strategy and sets a basis for further learning in the process of the strategic management of the higher education institution according to the scheme "plan-do-check-act". More so, the researcher asserted that the analysis of the content of the BSC of the universities proves that this instrument of the strategic management ensures successful implementation of the strategy, combines strategic and operational levels of the strategy, provides an effective measurement of organizational performance and forms the basis for the assessment of the achievement of the strategic goals of the university on the basis of the developed indicators.

Fahmi and Saudah (2015) researched on the applicability of BSC in Higher Education Institutions and which BSC perspectives are relevant for HEIs. As part of its contribution some benefits of using the BSC in HEIs, namely, such as; determining priorities on future planning and needs assessment, providing a clear structure for continuous quality improvement, establishing a culture of academic quality among the institutions, evaluating the efficient use of resources for each of the academic programs, and documenting the contribution of each activity towards the mission of the HEI so as to promote personal and academic excellence. Ljupco, predrag and gjorgji (2016) in their work designing a BCS as a strategic management system for higher education institutions: a case study in Macedonia stated that besides the expected improvement in the results of operations, the other additional benefits that can be expected from the successful implementation of the BSC system in educational institution are: effective strategic management; organizational synergy; improved motivation and satisfaction of employees; effective communication in the organization; effective decision-making process; reduced costs; increased

student satisfaction and satisfaction to other stakeholders; quick response to changes; increased competitive advantages.

Chimtengo, Mkandawire and Hanif (2017) evaluated the performance of the University of Malawi'sPolytechnic using the BSC model. The research employed a deductive approach and adopted a survey strategy. The results of their work indicated that the institution's performance was poor on all the perspectives of the BSC. Although, the performance of the college based on output performance measures was rated as good with the internal processes and innovation, and learning processes showing a strong correlation to performance measures.

In the work of Fijałkowska and Oliveira (2018) on the BSC in universities, it was discovered that the BSC provides a framework for performance measurement that allows for the increased transparency and accountability of those institutions which have adopted it.

Gap in Literature

From the review of these related literature, it can be summarized that while over the years researchers such as Umashankar & Dutta (2007), McDevitt, Giapponi, & Solomon (2008), Papenhausen & Einstein (2006), Taylor and Baines (2012) have concentrated their studies on developed economies, while few studies such as Ndoda & Sikwila (2015), Kureshi (2014), Bayat & Adekanbi (2013) have been carried out in the developing countries and as such this study intends to fill the gap by assessing the subject matter in Nigeria, a developing economy.

Hence to achieve this, the hypothesis below was subjected to test through data analysis:

H_0: Adoption of the BSC has no significant influence on the employers' rating of the products of Nigerian Higher Institutions

METHODOLOGY

For the purpose of carrying out a good analysis and reaching a reasonable conclusion, the research design that was adopted for this study was the survey research design where a quantitative method of data collection and analysis was used. The population of this study consisted of all the tertiary institutions in South Western Nigeria. However, the target population consisted of sixty-eight. publicly and privately-owned universities and polytechnics in southwest Nigeria. The study adopted the multi-stage sampling technique which made the sample selection in this study to be in two stages. First was the selection of the institutions that participated in the study while the second stage was the selection of the respondents. This study used primary data with the aid of a well structured questionnaire. Based on the sample size of the study, two hundred and seventy-two copies of the questionnaire were distributed.The data collected through the questionnaires, were collated using excels spread sheet and were subsequently analyzed using both descriptive and inferential statistics with the aid of the Statistical Package for Social Sciences (SPSS version 23.0). The descriptive statistics conducted were simple percentage, mean, median, mode and standard deviation. Inferential statistics was the multiple linear regression analysis.

Measurement of Variables

The two variables associated with this study were the independent/ explanatory and dependent variables. The independent/explanatory variable in this study was the BSC proxied by Financial Metrics (FMET), Customer Metrics (CMET), Internal Process Metric (IPMET) and Learning and Growth Metrics (LGMET) while the dependent variable in the study was the employers' rating of the products of the tertiary institutions.

Details can be found in Table 1

Table 1: Measurement of Variables

Variable Type	Variable Name	Proxy	Measurement
Dependent	Employers' Rating	ERAT	- Quality of graduates produced by the institutions - Ability to pass professional examinations
Independent	Financial Metrics	FMET	Whether the institutions are able to break-even The financial health of the institutions Whether the institution is making stakeholders happy Whether the institutions were able to attract quality staff
	Customer Metrics	CMET	Percentage change in the rate of admission subscription. Keeping the existing students happy How the institution is viewed in society The conduct of examination and assessment procedures
	Learning and Growth Metrics	LGMET	Are people aware of the latest industry trends Collaboration and knowledge sharing among staff Access to training and continuing education Ability to use latest devices and software
	Internal Process Metrics	IPMET	How smoothly academic is running Strategies put in place to overcome obstacles Efficiency of the human and material resources Design of training in line with the market demand
Control	Institution Age	AINS	The year of establishment of the institution
	Institution Size	SINS	Annual intake of students in the institution

Model Specification

The models for this study were formulated in line with the conceptual framework. The two variables associated with this study were the independent/explanatory and dependent variables. The independent/ explanatory variable in this study was Balanced Scorecard (BSC) proxied by Financial Metrics (FMET), Customer Metrics (CMET), Internal Process Metric (IPMET) and Learning and Growth Metrics (LGMET) while the dependent variable in the study is the employers' rating of the tertiary institutions' products.

Thus;

$$Y = f(X)$$

Where:

Y = dependent variable
X = independent variable
ERAT = f(BSC)

Where:

ERAT = Employer Rating
BSC = Balanced Scorecard
Y = Employer Rating (ERAT)
$X = x_1, x_2, x_3, x_4, x_5, x_6$

Where X = Balanced Scorecard

x_1 = Financial Metrics (FMET)
x_2 = Customer Metrics (CMET)
x_3 = Internal Process Metrics (IPMET)
x_4 = Learning and Growth Metrics (LGMET)
x_5 = Age of the Institution (AINS)
x_6 = Size of the Institution (SINS)

The empirical models are as follows:

$$ERTA = \beta_0 + \beta_1 FMET_{it} + \beta_2 CMET_{it} + \beta_3 IPMET_{it} + \beta_4 LGMET_{it} + \beta_5 AINS_{it} + \beta_6 SINS_{it} + \mu_{it}$$

Apriori Expectation

$$\beta_1, \dots \dots \beta_6 > 0$$

Where;

β_0 is the constant term, $\beta_1, \dots \dots \beta_6$ are the coefficients of the regression estimated and μ is the stochastic error term.

RESULTS AND DISCUSSION

Factor Analysis

Factor analysis was conducted on the primary data to reduce a large number of factors to a smaller number for the purpose of modelling and also for the selection of a subset factor from a largest where original variables that had the largest correlation with the principal components' factors were selected.

The result of factor analysis on employers rating questions showed that 5 out of the 7 items reached the acceptable threshold of 0.4 and were accepted for further statistical analysis. This acceptance was based on the proposition of Zinbarg, (2005) that all coefficients higher than 40% indicates that the data gathered had relatively high internal consistency and could be generalized as a reflection of the opinion of all respondents in the target population on the relationship between the BSC and employers' rating in the higher institutions in South Western Nigeria. For instance, the value of the first accepted question which states that graduates of public institutions are able to discharge assigned responsibilities without supervision was .866, the value of the second question on whether graduates of public institutions require little or no training on first appointment was 0.786, while the value of the question that graduates from public institutions are able to handle latest technology in the field, graduates of public institutions are aware of latest development in their field and graduate from public institutions adapt to changes easily are 0.895, 0.838, 0.744 respectively.

Table 2: Results of Factor Analysis for Employer Rating

S/NO	ITEM	Factor Loading
	NON-FINANCIAL PERFORMANCE- EMPLOYER RATING	
1	Employers' survey rating of Nigerian Institutions' graduate is very high	0.285
2	Graduates of Nigerian Institutions are able to discharge assigned responsibilities without supervision	0.866
3	Graduates of Nigerian Institutions require little or no training on first appointment	0.786
4	Graduates from Nigerian Institutions are able to handle the latest technology in the field	0.895
5	Graduates of Nigerian Institutions are aware of the latest development in their field	0.838
6	Graduates from Nigerian Institutions adapt to change easily	0.744

Researcher's Compilation, 2018

DESCRIPTIVE STATISTICS FOR DEPENDENT VARIABLE: EMPLOYER RATING

This section investigated the extent to which value has been created in the graduates of the Nigerian tertiary institutions during their training in the institutions using the employers' rating in which respondents were asked to indicate the level of their agreement or otherwise with certain statements. The extent of their agreement with the statements was captured with the use of a 5-point Likert scale.

In response to the question on whether graduates of Nigerian Institutions are able to discharge assigned responsibilities without supervision, 38.6% of the respondents strongly agreed while 26% agreed, 27.7% were undecided, 4.2% disagreed and 3.5% disagreed. Since, over 60% of the respondents were in agreement, it can be inferred that graduates of Nigerian Institutions are able to discharge assigned responsibilities without supervision. The mean score of 4.0 on a scale of 1-5 also suggested that the majority of the respondents agreed with the statement. On whether graduates of Nigerian institutions require little or no training on their first appointment, 36.5% and 28.8% of the respondents strongly agreed and agreed respectively. The remainder were distributed across the sample as 19.3% indifferent, 10.2% disagreed and 5.3% strongly disagreed. Taken together the percentage of agreed and strongly agreed, it can be said that graduates of Nigerian institutions require little or no training on their first appointment. This therefore, implies that value has been created by the institutions that trained them.

In like manner, it was also discovered that Nigerian trained graduates are able to handle the latest technology in the field which is also a good indication of value creation by the Nigerian institutions. This assertion was supported by the results of the descriptive statistics which revealed that 42.1%, 20.4%, 22.1%, 11.9% and 3.5% of the respondents strongly agreed, agreed, indifferent, disagreed and strongly disagreed respectively. The mean score of 4.0 further confirmed that majority of the respondents affirmed that graduates from Nigerian institutions are able to handle the latest technology in the field. Also, the survey results on the level of aware of Nigerian graduates about the latest developments in their respective field resulted in a mean score of 2.18 which implied that the respondents

perceived that the majority of the graduates of Nigerian institutions may be unaware of latest developments in their field.

Again, when asked about the promise of adaptability of the Nigerian graduates to change in organizations, a large proportion of the respondents (32.5% and 66% strongly agreed and agreed respectively) affirmed that graduates from Nigerian institutions adapted to change easily. Only 1.8% of the respondents strongly disagreed. The mean score for the statement was 4.45 which also suggested that the majority of the respondents were in total agreement with the statement that graduates from Nigerian institutions adapted to change easily.

Table 3: Descriptive Statistics for Employer's Rating

E	EMPLOYER RATING	SA	A	IND	D	SD	MN	MD	MO	SD
1	Graduates of public institutions are able to discharge assigned responsibilities without supervision	38.6	26	27.7	4.2	3.6	4	4	5	0.9
2	Graduates of public institutions require little or no training on first appointment	36.6	28.2	19.3	10.2	5.3	4	4	5	1
3	Graduates from public institutions are able to handle latest technology in the field	41.2	20.4	22.1	11.9	3.5	4	4	4	1
4	Graduates of public institutions are aware of the latest developments in their field	51.6	14	6.7	24.2	3.6	4	5	5	0.6
5	Graduates from public institutions adapt to change easily	32.3	66	-	-	1.8	4	5	5	1

DESCRIPTIVE STATISTICS FOR THE INDEPENDENT VARIABLE: FINANCIAL METRICS

This section sought to investigate whether there was improvement in the performance of Nigerian higher education institutions with respect to the usage of financial metrics, a key indicator of the BSC. From the results presented in Table 4.11, about 44% of the respondents strongly agreed that their institutions were able to generate sufficient revenue to augment the government's subvention after the adoption of the BSC that they were able to generate before they adopted the BSC. About 36% of the respondents also agreed with the statement that while only 4.1%, 8.6% and 6.3% of the respondents were undecided, disagreed and strongly disagreed respectively.

However, despite the increase in internally generated revenue as expressed by the respondents, the management of tertiary institutions in

Nigeria still depended largely on government intervention for infrastructural development. This position is supported by the survey result with about 82% respondents affirming that their Institutions depended solely on the government for infrastructure development. It is important to state that about 15% of the respondents that disagreed and strongly disagreed were from the private institutions. It therefore implies that public institutions in Nigeria are not yet self- sustaining like their private counterparts.

In response to the question on whether tertiary institutions in Nigeria were able to attract quality staff through regular payment of salary, the majority of the respondents were not able to decide, meaning that they probably do not agree that current staff salary at tertiary institutions is a good incentive. At the same time, they did not disagree that tertiary institutions in Nigeria are filled with quality staff since they are also part of the staff being referred to. This is one of the challenges of self-assessment in research. In contrast, the results on the adherence to the budget provision show a clearer position of the respondents. In these results as presented in Table 4.11, an overwhelming majority (83.5%) affirmed that the tertiary institutions hardly deviated from the budget provided which means that there is a high-level adherence to budget provision, that is, a high level of financial discipline was observed among the management of the tertiary institutions in Nigeria.

As for the revenue stream of the tertiary institutions in Nigeria, there was convincing evidence that majority of the higher institutions in Nigeria rely on school fees as the only source of internally generated revenue as freely expressed by about 67% of the respondents. It is however important to note that the 21% disagreement from some respondents is material to infer that there are some other viable sources of revenue for the tertiary institutions in Nigeria. Lastly, revenue drive was observed to be a common and frequent practice among the management of tertiary institutions in Nigeria since about 82% of the respondents confirmed that revenue drives are a major activity of tertiary institutions every semester.

Table 4: Descriptive Statistics for Financial Metrics

	FINANCIAL METRICS	SA	A	IND	D	SD	MN	MD	MO	SD
1	Tertiary Institutions are able to generate sufficient IGR to support the government subvention	44.2	36.8	4.1	8.6	6.3	3.94	4	5	1.05
2	Tertiary Institutions depend solely on the government for infrastructure development	40.2	42.1	1.9	11.5	4.3	4.05	4	4	0.92
3	Tertiary Institutions are able to attract quality staff through regular payment of salary	2.8	39.0	45.5	5.2	7.5	4.28	4	4	1.16
4	Tertiary Institutions hardly deviate from the budget provision	40.9	42.6	8.2	5.2	3.1	4.45	5	4	0.85
5	Student enrolment is the main source of revenue for the Tertiary Institutions	33.5	34.3	6.2	21.5	4.5	4.13	5	4	1.07
6	Revenue drive is a major activity of Tertiary Institutions every semester	43.8	38.6	7.4	4.4	5.8	4.19	4	4	1.00

DESCRIPTIVE STATISTICS FOR INDEPENDENT VARIABLE: LEARNING AND GROWTH METRICS

This section sought to investigate the respondent's perception on the existence of learning and growth opportunity in the tertiary institutions in Nigeria. The results are as captured in Table 4.12. Since PhD is an important requirement for teaching in higher institutions especially universities, the first question raised focus on ascertaining the level of support given to staff on this terminal degree. The results revealed that slightly above half of the respondents ascertained that their university provides the required support for the academic staff undergoing a PhD in other higher education institutions. However, about 42% of the respondents (majority of who was academic staff from private institutions) disagreed and strongly disagreed with this position. The high level of disagreement among the academic staff of private institutions may be attributed to unavailability of TETFund for the man power training in the private institutions. Attention of the government may be drawn to this.

Surprisingly, an overwhelming level of agreement was recorded for the perception of the respondents on the existence of opportunities for growth through in-service training in the higher education institutions in Nigeria. This position was supported by about 80% of the respondents affirming that there is provision for in service training in their higher education institutions. The 80% agreement also suggested that this opportunity existed in both public and private institutions. The result implies that lecturers do

not necessarily have to obtain a PhD before joining the institutions and that lower level staff are provided ample opportunities to grow within the system.

Furthermore, it is also evident from the results in Row 3 of Table 4.12 that the learning and growth opportunities created by the management of tertiary institutions are not limited to the acquisition of higher degrees alone. In the results, about 83% of the respondents agreed and strongly agreed that lecturers in higher education institutions attend both local and international conferences annually. It can also be inferred that lecturers from Nigerian higher education institutions have opportunities to interact with academic staff from other institutions even beyond the borders of this country which may strengthen their exposure to the latest developments in their field and make them better academics.

On the contrary, the degree of disagreement for the funding of research activities by the Nigerian government through the TETFund is very high. As in Column 4 of Table 4.12, about 25% and 29% of the respondents disagreeing and strongly disagreeing with the question on whether researches are funded by the government through the TETFund in higher education institutions. Although, there was about 37% level of agreement, the result simply means that more effort is required in this very important area. There is a limit to the level of growth and development that a nation can attain if researches are funded from the individual lecturer's pocket.

Another area calling for the attention of the government is the provision of adequate facilities for the learning activities in the tertiary institutions since a majority of the respondents expressed their displeasure for the gross inadequacy of the learning facilities in the tertiary institutions in Nigeria. As can be seen in Column 5, Table 4.12, about 59% of the respondents were in disagreement with the question on whether availability of appropriate learning materials is enjoyed in higher education institutions in Nigeria. In strict confidence, some of the respondents stated that their university lacked the state- of-the- art equipment for more practical training especially in the field of engineering and medical sciences which has led to the production of sub-standard graduates.

On the level of awareness of the lecturers with the latest analytical packages for research activities, there is a high score for the agreement

option, meaning that the majority of the respondents rated the lecturers well on their ability to use analytical packages for research activities. In addition, the majority of the lecturers sampled are familiar with the SPSS, Stata and EViews. However, only the SPSS regularly and very regularly used. Again, less than 10% of the lecturers sampled were aware of the R statistic and only about 2% of these samples have at one point or the other used the statistical tool for data analysis.

Table 5 Descriptive Statistics for Learning and Growth Metrics

	LEARNING AND GROWTH METRICS	SA	A	IND	D	SD	MN	MD	MO	SD
1	Academic staff are supported for the PhD programme by higher education institutions	29.3	25.2	3.3	32.5	9.7	3.12	4	2	1.66
2	There is provision for in service training in the higher education institutions	40.3	39.6	6.9	6.9	6.3	4.25	4	4	0.75
3	Lecturers in higher education Institutions attend both local and international conferences annually	46.5	37.1	5.0	3.8	7.5	4.06	4	4	0.92
4	Research is funded by the Tet fund in higher education institutions	18.3	19.1	8.2	25.2	29.3	3.03	2	1	0.51
5	Availability of appropriate learning materials is enjoyed in higher education institutions	15.1	12.3	14.5	35.9	22.3	2.01	3	2	1.02
6	Higher education institutions lecturers are aware of the latest analytical packages	51.4	26.0	9.2	8.2	5.3	4.28	4	5	0.65
7	Staff of higher education institutions have access to adequate training and continuing education	34.1	43.3	4.3	10.3	8.2	4.15	4	4	0.18

DESCRIPTIVE STATISTICS FOR THE INDEPENDENT VARIABLE: CUSTOMER METRICS

This section sought to investigate the respondent's perception on the level of customer satisfaction attained by the tertiary institutions in Nigeria. The survey result for this variable suggested that the customers who are the parents, guardians and students perceived that the services of the tertiary institutions were satisfactory. This position was based on the descriptive statistics results in Line 1 of Table 4.13where more than 80% of the respondents confirmed that there was high graduate turnover in the public institutions in the past few years. Where there is high graduate turnover, it simply means there is high student enrolment and since high patronage according to Hussein, Mazen & Thierry (2012) is an indication for satisfactory service delivery, it can be inferred that there is acceptable level of service delivery by the tertiary institutions in Nigeria. Another dimension to this result is that there is reduction in student time being

wasted as an increase in enrolment may not necessarily lead to an increase in graduate turnover. There are instances where an increase in enrolment led to over stressing the carrying capacity of the institutions and thus leading to students being graduated in batches.

Another good indication of customer satisfaction in this study was the rate of voluntary admission subscription for the programme of the institutions. As expressed by Taylor, (2012) one of the ways to identify distressed organization is through aggressive marketing. However, the finding of this study revealed that higher education institutions in Nigeria rarely advertise in national dailies as about 80% of the respondents testified that their institutions did not advertise student admission in national dailies as frequently in the last five years. Similarly, the global rating of the Nigerian institutions was also impressive, testifying to the high satisfactory performance of the Nigerian higher institutions since about 72% of the respondents either agreed or strongly agreed that higher education institutions witnessed a high global rating in the last three years

Similarly, given the high demand for higher degrees in Nigeria, the results revealed that there is high agitation for new courses to be introduced by the higher education institutions in Nigeria as well as the establishment of new institutions in the country. This agitation may not be unconnected with the satisfactory performance of the existing institutions. In Table 4.13, 25.1% of the respondent strongly agreed with the statement on agitation for new courses and 22.3 also agreed. Taking together, a moderately large number of respondents revealed that there is persistent agitation for the introduction of new courses.

The results in Column 6 of Table 4.13 also indicated that Nigerian higher education institutions have attained great mile stone in the areas of research and publication. A response rate of 76% in affirmation expressed by the respondents suggested that scholars from the Nigerian institutions were able to publish their research papers in reputable international journals. The publications also enjoyed good citations by scholars from other parts of the world. In addition, the mean score for the results shows that out of the six items only one produced a mean score that was less than 4.0 and the mean of mean computed was 3.96. Therefore, in summary, it can be concluded that Nigerian institutions have done their best to provide a reasonable service to the users of their service.

Table 6: Descriptive Statistics for Customer Metrics

	CUSTOMER METRICS	SA	A	IND	D	SD	MN	MD	MO	SD
1	There is high graduate turnover in the tertiary institutions	37.7	46.5	3.3	7.5	3.8	4.4	4	4	1.10
2	There is an increase in student enrolment in the public institutions in the last five years	43.4	41.5	5.0	6.3	3.8	4.13	4	4	1.04
3	Higher education institutions in Nigeria did not advertise student admission in national dailies frequently in the last five years.	44.7	35.8	4.4	9.4	5.7	4.19	4	5	0.91
4	Higher education institutions have witnessed a high global rating in the last three years	31.9	40.3	5.0	8.8	13.0	4.11	4	4	1.13
5	There is high agitation for new courses to be introduced by the higher education institutions	25.1	22.3	24.5	25.9	2.3	2.45	2	3	1.37
6	Number of research publications/citations in international research journals is on the increase	46.4	31.3	4.9	9.2	8.3	4.45	5	5	0.15

DESCRIPTIVE STATISTICS FOR INDEPENDENT VARIABLE: INTERNAL PROCESS METRICS

This section sought to investigate the respondent's perception on the degree of advancement in internal process metrics attained by the tertiary institutions in Nigeria. It could be seen that human and material resources of the higher education institution were effectively utilized after the introduction of the internal process metrics. This conclusion was drawn from the responses obtained from the institutions sampled where about 68% of the respondents ascertained that efficiency of the human and material resource in higher education institutions had increased in the past five years. Since this period witnessed the adoption of the BSC by most of the higher institutions in Nigeria, the increase in efficiency may be connected with the use of the internal process metric.

In further investigation of the use of the internal process metrics, the study sought to find out whether improvement in efficiency translated to reduction in redundancy and efficient use of time vis a vis students registration. The results as in Column 2 of Table 4.14 revealed that a large number of respondents, that is, about 75% of the respondents either strongly agreed or agreed that the time required for course registration is sufficient. In simple terms, the results implied that through the internal process metrics, the institutions considered in this study were able to ascertain the appropriate time required for student registration which is an indication of a functional internal process metrics.

A dramatic improvement was also witnessed by the higher education institutions in Nigeria was a significant decline in the occurrence of industrial action in the recent years. As presented on the third row of Table 4.14, about 73% of the respondents ascertained that their institutions witnessed an uninterrupted academic calendar in the past few years. This period coincided with the adoption of the BSC; it could mean that both the management and union leaders have devised better means of channelling their grievances which implied that, the internal process is now more efficient than it was before its adoption. It also meant that there is better student management as strike action can be sponsored by both a student body and staff union.

Similarly, as part of the efforts on the management to improve efficiency, a commendable effort is being dedicated to training and re-training of the staff. As in Table 4.14 a large proportion of the respondents agreed and strongly agreed that there is regular review and design of training in line with market demand. This may therefore be one of the reasons why course evaluations and assessments are considered satisfactory by the regulatory authorities as expressed by a good number of respondents for this study.

Further, the study established some other notable improvement in internal processes after adoption of the BSC. For instance, the study found that about 81% agreements for the statement that the degree of deployment of technology in learning experience is very high. Also, the degree to which the curriculum is up to date with educational, business and commercial trends is satisfactory had a 72% agreement while the statement on higher percentage of students completing under/postgraduate programs at the prescribed period had a 74% agreement from the respondents.

A significant requirement for internal process effectiveness, documented in Kaplan and Norton (1999) is that every organization should do a periodic review of all the activities of the organization in order to incorporate significant changes in both macro and micro economic situations. This is yet to happen in the tertiary institutions in Nigeria. The results as in Table 4.14 revealed that more than 70% of the respondents disagreed that a periodic review of each program is done in their institutions.

Table 7: Descriptive Statistics for Internal Process Metrics

	INTERNAL PROCESS METRICS	SA	A	IND	D	SD	MN	MD	MO	SD
1	Efficiency of the human and material resources in higher education institutions has increased in the past five years.	31.5	37.7	3.3	18.2	8.1	4.21	3.0	4.0	1.08
2	Time required to register for courses is perceived sufficient	41.4	33.5	5.0	16.3	3.8	4.18	4.0	4.0	1.04
3	There is uninterrupted academic calendar in the higher education institutions	17.5	55.8	1.8	21.1	3.9	4.0	4.0	4.0	1.0
4	There is regular review and design of training in line with market demand	19.6	52.3	1.8	24.2	2.2	4.17	4.0	4.0	1.0
5	Course evaluations and assessments are considered satisfactory by the regulatory authorities.	14.7	55.4	1.6	27.1	1.2	4.22	3.5	4.0	1.16
6	Degree of deployment of technology in the learning experience is very high	54.4	26.4	13.9	3.1	3.2	4.52	5	5	0.26
7	Degree to which the curriculum is up to date with educational, business and commercial trends is satisfactory	30.2	41.7	1.8	2.6	23.7	4.0	4.0	4.0	1.0
8	Periodic review of each program is done in my institution	11.2	13.1	1.1	45.3	28.3	4.17	4	5	1.18
9	Higher percentage of students completing under/postgraduate programs at the prescribed period.	58.2	16.1	22.5	2.1	1.1	4.27	4	5	1.20
10	Adequate strategies are put in place to overcome obstacles	60	6.3	29.5	4.2	-	4.0	4.0	5.0	1.0

Reliability Test

Reliability analysis was conducted for the dependent variable, employer rating, the four items of the independent variables such as financial metrics, customer metrics, growth and learning metrics and internal process metrics and the control variables which included size and age of the institutions. The findings indicated that employer rating produced a coefficient of 0.901, financial metrics, customer metrics, learning and growth metrics, internal process metrics, age and size of the institution produce a coefficient of 0.704, 0.793, 0.710, 0.768 0.813and 0.789 respectively. Since, all the items produced a Cronbach's Alpha greater than the minimum acceptable coefficient, the data collected can be considered reliable and therefore accepted for further statistical analysis.

Table 8: Reliability Test

	Variables	Cronbach's Alpha	No. of Items
1	Employer Rating	0.901	5
2	Financial Metrics	0.704	6
3	Customer Metrics	0.793	7
4	Learning and Growth Metrics	0.710	6
5	Internal Process Metrics	0.768	10

Normality Test for Employer Rating

The One-Sample Kolmogorov-Smirnov Test was used to test for the normality of the dependent variables (employer rating). The null and alternative hypotheses for this test were as follows:

H_0: The sample from which the data was collected was not normally distributed

H_1: The sample from which the data was collected was normally distributed

The results obtained in table in the appendix indicate that the Kolmogorov-Smirnov Z was 3.316 (p-value = 0.000). Since the p-value was not greater than 0.05, the null hypothesis was not accepted. The study therefore concluded that the data was collected from a normally distributed sample. It was also noted in the table that the mean was 3.7444 with a standard deviation of 0.865 on a scale of 1-5, indicating that the data are closely related and can therefore be relied on for further statistical analysis. The result of the P.P plot in Figure 4.4 also suggests that the sample was normally distributed since all the points were close to the regression line.

Table 9: One-Sample Kolmogorov-Smirnov Test for Employer's Rating

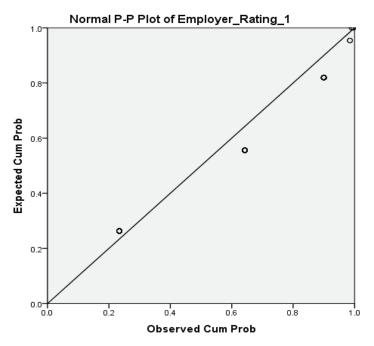|		Employer Rating
N		209
Normal Parameters[a] Std. Deviation	Mean	3.7444
		0.86520
Most Extreme Differences	Absolute	3.316
	Positive Negative 3.316 -0.185	
Kolmogorov-Smirnov Z		3.316
Asymp. Sig. (2-tailed)		0.000

Researcher's Compilation, 2018

Figure 4.4 P.P Plot for Employer Rating

Regression Analysis

To investigate whether adoption of the BSC had significant influence on employers' rating of the products of Nigerian higher education institutions, the study employed an ordinary least regression analysis. According to Kothari and Garg (2014), regression is the determination of a statistical influence of one variable on another variable or variables. In simple regression, there are two variables, one variable (classified as independent) is the cause of the behaviour of another one (classified as dependent variable). When there are two or more than two independent variables, the analysis concerning relationship is known as multiple regressions and the equation describing such relationship is the multiple regression equation. In a typical regression analysis, three components are important (model summary, analysis of variance (ANOVA) and the beta coefficient).

Model summary is where coefficient of determination (R-square) and some other components such as R and adjusted R-square are found. R-square explains the amount of variation in the dependent variable attributable to the collective effective of all the independent variables. Kothari and Garg (2014) described ANOVA as a procedure for testing the difference among different groups of data for homogeneity. The essence of ANOVA is that the total amount of variation in a set of data is broken down into two types, that amount which can be attributed to chance and that amount which can be attributed to specified causes while T- test was also used in the context of the multiple regression analysis for judging the significance of multiple regression coefficients.

In this study, R-square was 0.633, suggesting that about 63% of the variation in the ways and manner in which graduates of the Nigerian institutions are rated by the employers is associated with the combined effects of all the four components of the BSC (financial metrics, customer metrics, learning and growth metrics and internal process metrics) as well as the two control variables (age and size of the institutions) while the remaining 37% can be attributed to other variables not captured in this study. The study is consistent with that of Adejuwon (2016) who obtained an R-square of 39% in a study of the relationship between the BSC and value creation of the listed manufacturing companies in Nigeria. Other studies in different African countries recorded a smaller R-square for studies on the BSC.

To determine the individual influence of the independent variables on the dependent variable, the beta coefficient results were analyzed. For the financial metrics, the results obtained were a beta coefficient of 1.439 with a t-statistics of 3.579 and p-value of 0.000. The result shows that financial metrics have a significant influence on the way products of the higher education institutions are rated by their employers. As earlier discussed in the descriptive statistics, the survey result revealed that institutions that adopted the BSC were able to generate additional income to argument the subvention from the proprietors of the institution. Where there is an adequate financial resource, there is higher possibility that the institution will be able to attract quality personnel which may lead to the production of quality graduates. It is also possible that availability of financial resources may lead to the production of adequate learning facilities which may further enhance the quality of graduates being produced. The result supports the findings of Mahdieh and Pedram (2011) on investigation into the interrelation between BSC factors and firm value where a significant effect was reported.

Internal process metrics was also found to have significant influence on the employer's rating of the products of the Nigerian higher education institutions. As presented in Table 4.20, the beta coefficient was 0.203 which implied that a unit change in the internal process of the institutions may result into about 20% increase in the way graduates of the Nigerian higher education institutions are rated by their employers. The results can be interpreted in the light of the Institutional Theory. The theory views innovation as one of the main sources of competitive advantage and it is essential for enhancing product quality. An important aspect of the measurement of the internal process in this study was the frequency of review of the academic curriculum of the institutions sampled. Since, the curriculum was reviewed regularly, it can be inferred that there was high degree of innovation in the Nigerian higher education institutions. This innovation could have led to the creation of additional value in the graduates of those institutions which may have contributed to the way they are rated by their employers.

Similarly, the result of the beta coefficient and t-statistics for the learning and growth metrics produced sufficient evidence to conclude that learning and growth metrics have a significant influence on employer's rating of the Nigerian graduates. The beta coefficient was 5.547 while the

t- statistics was 2.614. Since the computed t-statistics of 2.614 is greater than the 2.16 obtainable from the t-statistic table, one can conclude that the learning and growth metrics has a statistically significant influence on the employers rating of the Nigerian graduates. The result can be interpreted in the light of the Resource-based Theory that provides that an organization can reap the reward of providing training for employees in several ways because a well-trained employee helps increase productivity, improve workers retention rates, customer satisfaction and creativity. Since it was established in the descriptive statistics that there was adequate provision of in-service training for the employees of the sampled institutions, it may be reasonable to assume that the quality of training received by the employees contributed to the production of quality graduates which may directly or indirectly influence the way those graduates are rated by their employers.

However, contrary to the existing evidence on the relationship between customer metrics and employer rating (Fahmi &Saudah, 2015; Taylor & Baines, 2012), this study produced an insignificant result, indicating that the customer metrics does not influence the rating of the Nigerian graduates. Although, this evidence is scarce in the literature, it simply suggests that most institutions paid less attention to customer satisfaction in the activities. The result therefore necessitates the acceptance of the null hypothesis that there was no significant relationship between customer metrics and employers rating of the Nigerian graduates.

Table 10: Regression Results for Balanced Scorecard and Employers Rating

Multiple R: 0.795
R-Square: 0.633

	Beta	Std. Err.	T	Sig.
Constant	15.263	8.588	1.777	0.077
Financial Metrics	1.439	0.402	3.579	0.000
Internal Process Metrics	0.203	0.027	7.415	0.000
Learning & Growth Metrics	5.547	2.122	2.614	0.009
Customer Metrics	0.065	0.039	1.655	0.099
Institution Age	0.037	0.012	3.117	0.002
Institution Size	0.554	0.249	2.229	0.027

Researcher's Compilation, 2018

CONCLUSION AND RECOMMENDATION

This study empirically investigated the influence of the adoption of the BSC on non-financial performance of tertiary institutions in South West Nigeria. The study adopted a survey research design where 209 respondents from the tertiary institutions in South West Nigeria participated in the survey. Findings from the descriptive statistics showed that there is improvement in the performance of tertiary institutions after the adoption of the BSC in some specific areas such as internally generated revenue and improvement in staff training and development. The regression result also suggests that about 63% of the variation in the ways and manner in which graduates of the Nigerian institutions were rated by their employers was associated with the combined effects of all the four components of the BSC (financial metrics, customer metrics, learning and growth metrics and internal process metrics)

It is therefore concluded that the adoption of the BSC had a significant influence on the value creation of the tertiary institutions in Nigeria.Therefore, the adoption of the BSC is recommended for all tertiary institutions because of its multifarious benefits. Another important discovery from this study was the low level of commitment of academic staff of the private institutions to the highest academic degree (PhD) which was attributed to unavailability of the TETFund for manpower training in the private institutions. Attention of the government is hereby drawn to this, hoping that there will be a revision of the government policy on the administration of the TETFund.

Another area needing quick intervention of the government is the provision of adequate facilities for the teaching and learning activities in the tertiary institutions since a majority of the respondents expresses their displeasure for the gross inadequacy of the learning facilities in the tertiary institutions in Nigeria.

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APPENDIX

One-Sample Kolmogorov-Smirnov Test for Employer's Rating

		Employer Rating
N		209
Normal Parameters[a]	Mean	3.7444
	Std. Deviation	0.86520
Most Extreme Differences	Absolute	3.316
	Positive	3.316
	Negative	-0.185
Kolmogorov-Smirnov Z		3.316
Asymp. Sig. (2-tailed)		0.000