Innovations

Balanced Scorecard as a Strategic Management Tool in Improving Performance: A Study of Selected Firms in Nigeria

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Abstract

The concept of a balanced scorecard emerged as a need to measure performance. The balanced scorecard helps strategic managers convert goals and objectives into day-to-day operational activities by answering the questions of what, when, who and how? The objective of this study was first to determine the balanced scorecard measurements used by the selected firms and then how it affects the performance of Cadbury Nigeria Plc, UAC of Nigeria Plc, Nestle Nigeria Plc, Chi Limited, Flour mills of Nigeria, Friesland Campina WAMCO Nigeria Plc, A & P Foods Limited and Unilever Plc. The data for this study were gathered using the questionnaire as an instrument. Four hundred copies of the questionnaire were administered to employees of the firms. The research hypotheses were tested with the Structural Equation Model (SMART-PLS). The result showed that the financial perspective has a significant effect on product performance, customer perspective has an effect on market performance, there is a relationship between internal business processes and organizational effectiveness and there is an existing effect between environmental perspective and innovative performance. It is recommended that the management of the selected firms must recognize the importance of a balanced scorecard as a strategic tool in converting waste to resources and improving performance. Managers must adopt the use of a balanced scorecard if they intend to be innovative and remain in business.

Keywords:1.balanced scorecard; 2.organizational performance; 3.strategic management; 4.food and beverage firms; 5.Nigeria

1. Introduction

Globalization has forced a lot of firms to adapt to the changing environment towards achieving a competitive advantage. To attain competitive advantage, firms must develop their capacity to learn faster and become better. They must learn from their failures and build on their successes, within and outside, with the use of technology. One way by which a firm can be competitive in its environment is by eliminating waste. Natural resources are the concept that can be used to meet up with

market demands as it encourages, supports, accelerates and rewards new knowledge in the form of skills supported by the framework of the organization built to encourage employment, self-growth and development (Broekema, *et al.*, 2018; ufua, *et al.*, 2021).

Organizational performance is the key metric and indicator for achieving organizational goals. Identifying the measures that drive an organization's performance is important for any manager in an organization. Continuous changes in the business environment have affected organizations in the search for new managerial tools and systems that will help them enhance and maintain performance. Organizations have set goals and objectives, and to survive the highly competitive environment, organizations need strategic tools for measuring performance toward achieving set goals and objectives.

The balanced scorecard aids management in clarifying the business' strategy, tying strategic objectives to the company's financial management, tracking the primary business strategy elements, incorporating key goals into the allocation of resources process, comparing the performance of different business units, facilitating organizational change and increasing managerial strategy and vision within the institution. Numerous studies conducted throughout the world demonstrate the relevance of using a balanced scorecard to improve organizational performance (Marin, 2017; Reda, 2017; Osewe, 2019; & Oyerogbo and Adekola 2021). Most times, waste makes the working environment unhygienic. Therefore, for an organization to create a healthy working environment, they have to be innovative in converting this waste to resources which bring more financial profits and market share to the firm.

The lack of relevant research in the food and beverage industry in Nigeria regarding the use of a balanced scorecard and its importance to organizational performance is one reason why this research was undertaken. Other reasons include to know the balanced scorecard measurements utilized by the selected firms and to determine whether the employees are aware of the use of balanced scorecard. Are there training/orientation programs put in place by the management to constantly educate its employees about the importance of balanced scorecard? Most importantly, is there a positive and constant relationship between the balanced scorecard and the organizational performance? In addition, because of globalization, strategy has become more relevant as organizations have adopted different strategic means to become relevant and well-known in their various societies. Barriers to strategy are vast, and they range from application complexity, cross-cultural influence and government policy. Many of such organizations are Cadbury Nigeria Plc, UAC of Nigeria Plc, Nestle Nigeria Plc, Chi Limited, Flour mills of Nigeria, Friesland Campina WAMCO Nigeria PLC, A & P foods Limited and Unilever Plc. This research explains the conceptions, the importance of strategic planning and linking balanced scorecards to organizational performance.

2. Literature Review

2.1. Conceptualization

2.1.1. Origin of Balanced Scorecard

Kaplan and Norton developed and shared the initiative of the balanced scorecard in 1992 in an article published in the *Harvard Business Review* titled "The balanced scorecard-measures that drive performance" (Kaplan and Norton, 1992). Since then, the concept of a balanced scorecard has become increasingly popular. To develop the idea of a balanced scorecard into a strategic management system, Kaplan and Norton penned several articles and books. These works serve as a guide for what kinds of things businesses should measure to transform their company goals into an action plan. The term "balanced scorecard" refers to the practice of giving equal weight to both long-term and short-term goals, financial and non-financial measures, leading and lagging indicators, as well as internal and external performance perspectives. A balanced scorecard is a business management concept that, according to Rigby and Bilodeau, 2018. "converts both financial and non-financial information into a comprehensive strategy which enables the firm to assess its performance and accomplish short and long-term objectives". It does this by translating purpose and vision statements into an all-encompassing list of goals and performance measurements that can be defined and evaluated. See Figure 1 (Kaplan and Norton, 1996).

2.1.2. Measures of Balanced Scorecard

• **Growth/Learning viewpoint:** This is centered on the development of a mechanism to fill knowledge, process, information systems and organizational culture gaps, as well as to remain always inventive. Measures should be chosen as leading indicators to value personnel, enhance productivity, build a trained workforce, promote core skills and allow efficient information systems (Kaplan and Norton, 1996; Sofyani, and Nazaruddin, 2019). Employee

training, satisfaction, retention, proportion, productivity, skills and technology metrics are all common key performance indicators in this perspective.

- **Internal Business viewpoint**: To satisfy customers with the internal business processes, the firm has to tailor its products and services to fit the consumer's wants(Vladimir, *et al.*, 2020). Repeated orders, product unit cost, waste management/recycling, stock replenishment durations, manufacturing defect quantity, nearness to market for new goods and product innovation are all common key performance indicators in this viewpoint.
- **Customer/client viewpoint:** In today's world, customer attention and satisfaction are the most important goals for every firm. Customers seek out substitute goods that fit their taste when they are unhappy with a particular product and the company's future performance may suffer, even if the current financial performance appears to be strong(Singh, and Arora 2018). Corporate image, customer acquisition, satisfaction and retention, timely delivery, customer service/complaints and market share are all common key performance indicators in this perspective.
- **Financial viewpoint:** All the purposes of the previous viewpoints and criteria come together in the financial viewpoint, which acts as a focal point or conclusion. Measures should be established to meet these goals of a high rate of return on investment, maximum profitability, reduced capital expenses and shareholder satisfaction (Albuhisi, and Abdallah 2018). Key performance indicators include financial return, growth in sales, capital investments, stock turnover, functional operating income, net income and credit rating.

These four perspectives and measures listed above are not exclusive to all organizations. More viewpoints were discovered after analyzing the balanced scorecard. These can be included in a balanced scorecard based on the company's needs:

- Strategic Competitive Perspective: To attain a long-term competitive edge, businesses must evaluate their operations in terms of how well they rank in the minds of customers vs. rivals and provide low-cost, high-value products and services (Kaplan and Norton 2004; Venelin, Marin 2017). Under this perspective, key performance indicators might include long-term competitive advantage/market share, new product development and brands in the overall brands in the market.
- **Social Viewpoint:** In today's social situation, companies should participate in activities that are mandated by law and are vital for some societal benefits but are not in the company's best interests. As an homage to society for being a part of it, companies strive to accept duties from stakeholders such as consumers, employees, investors, communities and others (Hamidreza, *et al.*, 2017). Funding towards health, education, people who are disabled, training programs and livelihood opportunities, natural disasters, women and children benefits and privileges, cultural and sports activities and rural development are all examples of critical performance metrics within this approach.
- Environmental Perspective: This point of view is concerned with, among other things, the environment in which the company is located, the use of natural resources and manufacturing enterprises' energy usage. Businesses are responsible for environmental protection and must follow municipal legislation (Tabatabaei, 2017). Some of the key performance measures that can be used in this context are effectiveness in energy and material usage, pollution control, funds for the protection of the environment, green production, green procurement, wastage recycled and adherence to regulatory requirements.

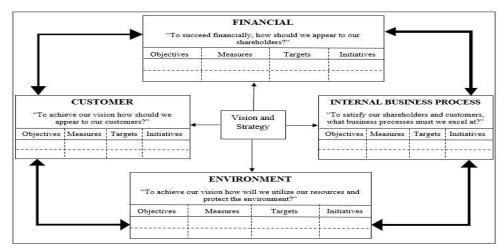


Figure 1. Translating vision and strategy: four perspectives. Adapted from Kaplan, (2010).

2.1.3. Strategic Management and Balanced Scorecard

A series of activities and choices expressed in designing and implementing an organizational goal is what is known as strategic management (Hasan and Chyi, 2017). In addition, strategic management is characterized by a complete and integrated set of plans, as well as the efficient execution of those goals. In the late 1960s, a management technique known as strategic management was developed to create a performance system that could discriminate between high performers and low performers (Sharma, and Sharma 2021). Researchers have developed hypotheses and methodologies in quantifying differences in performance, and even in the early stages of the project, they appropriated a variety of strategies from other domains and areas of study to expedite the process (Guix and Font 2020). Academic publications, on a global scale, are crucial in the collection and distribution of information to build the strategic management study. These roles contributed significantly to the growth of the strategic management discipline (Day, et al., 2019). Similarly, the development of strategic management was hastened by the combination of two additional components. First, the diverse and multidisciplinary character of strategic management has led to a variety of ontological and epistemological viewpoints being applied to the topic (Hu, et al., 2017). These viewpoints have had an impact on the field. Secondly, managers are obligated to develop and set up an operational activities plan, as this falls under their responsibilities (Dobrovic, et al., 2018).

According to studies on strategic management, two points of view are essential to the continued existence of a business. The first strategy is known as the content-oriented approach, and it proposes using attention-grabbing tactics to achieve a long-term competitive advantage, particularly concerning brand positioning (Sardjono, *et al.*, 2020). In addition to this, the resource-based perspective helps in laying the foundations for strategic management, which is another area in which it is supported (Bento, *et al.*, 2017). The second technique involves a procedure that considers the how and when questions of strategy formulation and implementation to the planning and learning process (Arasy, 2017; Llach, *et al.*, 2017). This is an important aspect of the process-oriented approach. The process of strategic management may be broken down into four primary historical phases: the analysis of the strategy, the development of the strategy, the execution of the strategy and the assessment of the strategy. In former years, strategic management addressed issues regarding how an organization competes in the business environment externally (Rasolofo-Distler, and Distler 2018).

Currently, strategic management has been seen as the key to solving problems relating to organizational performance (Arasy, and Achmad 2019). Both strategy implementation and strategy as a practice have made significant contributions to the formation of all-encompassing pathways for strategic management and performance, the latter being the primary factor in determining whether or not an organization is successful (Carlos, *et al.*, 2018). The implementation of a balanced scorecard is what ultimately leads to empirical successes inside a strategic management system.

2.1.5. Performance Measurement and Balanced Scorecard

Balanced scorecards gained popularity among academics and strategic managers all over the world. Strategic managers with the help of the scorecard have been able to view their organizations' performance from different points of view, such as the different perspectives, looking at how to balance and link the non-financial and financial aspects, the intangible and tangible aspects and product or business innovations and improvements, employee's/organizational learning and internal businesses (Kaplan, 2010; Ajibolade, and Oyewo, 2017; Obamiro, *et al.*, 2014). Kaplan and Norton's scorecard, launched in 1992, was designed for top-level managers. The balanced scorecard helps managers design and measure their performance if it follows the firm's goals and objectives (putting the organization's vision and mission into strategic action plans) while providing a clear pathway to follow (that is guiding the day-to-day operational activities of the firm). Internal business operations and outward outputs of those processes, as well as strategic performance, may all be enhanced by offering feedback. To ensure improved long-term performance, the balanced scorecard focuses not just on financial achievements, but also on the human factors that lead to those outcomes.

The balanced scorecard approach is designed to help managers focus on the important performance indicators that drive a company's success. As stated by Kaplan and Norton 2006, the scorecard concept is as follows: the generally accepted financial matrix shows the record of past activities, which is a good narrative for organizations in this modern era who are not interested in investing for the long term and connecting potential customers to succeed, not forgetting the importance of a financial perspective that cannot stand alone because it lacks the necessary information required in this era of information technology to lead an organization into the desired future. Considering other factors such as technological advancements, creativity and innovations, employees, suppliers, business processes and customers, generally, the four vocal points of the balanced scorecard are learning and growth, internal business processes and financial and customer viewpoint. The

application of these four metrics limits managers to these four perspectives only. Many businesses have begun to use balanced scorecards as the cornerstone of their organization's strategic management tool. The balanced scorecard has been used by managers to tie their business and companies' goals and objectives to the performance, where is there is a shift from expenses reduction to change and development in the form of creativity and innovations (Fijałkowska, and Oliveira 2018). The scorecard over the years developed from an easy evaluation of performance to a comprehensive strategic planning and management system that helps leaders to effectively execute their plans (Köseoglu, *et al.*, 2017).

2.2. Theoretical Framework

2.2.1. Contingency Theory

Contingency theory has its origins in the 1960s organization theory literature (Kangwu, 2010). Since the early 1980s, this idea has evolved swiftly as a milestone in organizational design. This theory has considerably broadened an attempt to construct the finest and universal formal systems for organizations to accomplish plans and objectives by asserting that the optimal control mechanisms depend on the conditions surrounding an organization. Early academics looked at the role of the environment, ICT, uncertainty and structure in the construction of organizations. Contingency theory is now backed by a large body of literature and was used to guide this study.

According to scientific management, there is just one optimum technique to create performance metrics that optimize efficiency and effectiveness. Contingency theory, developed in opposition to the universal approach, suggests that the design and usage of performance assessments are influenced by organizational and environmental circumstances. Better alignment is thought to lead to higher organizational performance (Ahmed, *et al.*, 2019), whereas bad alignment leads to worse performance. As a result, a universal control technique does not exist, according to contingency theory's reasoning.

Application

Performance assessment has traditionally been thought of as a passive instrument that provides data to aid management decision-making. However, sociological perspectives regard it as more active, providing individuals with the capacity to attain their goals (Chenhall, and Senior 2017). Organizations adjust their structures on purpose to keep up with shifting contingency variables. O'Sullivan, and Cooper 2021, stated that management's indicated role is ambiguous but favorable. Managers may intelligently manage this adaptability to the environment to preserve their organization's high performance. The transition from misfit to fit is an adaptive process that is central to contingency theory. Through the controllers' coordination adaptation to its environment through the implementation of better-fitting control systems, the contingency theory sees management favorably. This method aids in comprehending how and why various performance systems and balanced scorecards become established and are extensively adopted in various situations. A lot of contingency theory-based empirical research looks for systematic correlations between performance-measuring systems and specific environmental factors. Technology and the environment influence the allocation of organizational power and the extent to which processes may be articulated. Five contingent variables were discovered by Kilubi, and Rogers 2018, which include:

- task and external environment uncertainty;
- firm technology and interdependence;
- industry, firm and unit variables, such as size, diversification and structure;
- competitive strategy and mission and
- Observable nature of behavior and outcome.

Relevance to This Study

Contingency theory suggests that an organization remains open to its environment, allowing it to constantly learn, improve and update its organizational structure, business processes, goals and objectives. Therefore, the balanced scorecard perspectives require constant upgrades because of the complexities of the business environment (Kaplan, and Norton 1992). The contingency theory creates an opportunity for organizations to address and improve on financial issues such as revenue expenses, ROI and net expenses as well as know how the organization can satisfy its shareholders (Mareta, 2015). Analyzing customer perspectives concerning contingency theory, an organization will look forward to satisfying and retaining its customers when they know its customer's perceptions (Alzaabi, and Al-Dhaafri 2018).

In internal business processes, the organization is open to its strengths, which are "what should we be best at" and "how can we be better in areas such as inventory control, quality control, and product lead time?" (Osewe, et al., 2018). Finally, through learning and growth, seeking to create value within the organization's employees with the continuous change in the market

atmosphere is one of the ways by which employees seek satisfaction and develop their skills through training, thereby creating value for themselves and the organization (Muhammad, et al., 2020).

2.3. Literature Gap

Theoretically, other researchers have used grey system theory, knowledge management theory, rational choice theory, resource-based view theory, stakeholder theory and institutional theory. However, this research seeks to introduce the use of the contingency theory (Reda, 2017; Dobrovic, *et al.*, 2018; Osewe, 2019). Geographically, several scholars have worked on a balanced scorecard and its effect on organizational performance in West Africa (Kangwu, 2010; Oyerogbo, and Adekola 2021). However, the major difference is the study area used in the research, which is food and beverage firms in Lagos and Nigeria, and the methods used in carrying out this research (questionnaire and SEM-PLS). Moreover, the combination of the research measurement is another strong difference that highlights this research work.

3. Research Methodology

The survey technique was utilized in gathering data from the field with the use of a questionnaire to help the researcher test the effect of a balanced scorecard on organizational performance in Cadbury Nigeria Plc, UAC of Nigeria Plc, Nestle Nigeria Plc, Chi Limited, Flour mills of Nigeria, Friesland Campina WAMCO Nigeria PLC, A & P foods Limited and Unilever Plc. The selected firms were chosen because they are listed in the Nigerian stock exchange market and they are among the top 15 food and beverage firms in Nigeria. The questionnaire method involves the collection of data with the use of face-to-face conversations, through the use of a structured questionnaire. The objective population for the examination was the managerial and non-managerial workers of the selected firms, which, in the long run, helped to estimate the frame and size. The information accumulated was arranged, coded and broken down utilizing the SEM-PLS. SEM-PLS is a tool that is very good for analyzing complex inter-relationships between observed variables, hence, its flexibility cannot be over-emphasized with regards to data requirements and measurement specifications. The total number of employees from the selected firms was 17,133. A researcher must, however, collect a large enough sample size to reach the stability corridor (Kretzschmar, and Gignac 2019; Ezebor, et al., 2019). Hence the researcher increased the sample size to 400 respondents. See Table 1 below.

Table 1. Number of employees in the selected firms.

| S/N | Selected Firms | Population | Sample Size |
|-----|------------------------|------------|-------------|
| 1 | Cadbury Nigeria Plc | 550 | 13 |
| 2 | Nestle Nigeria Plc | 2187 | 51 |
| 3 | UAC of Nigeria Plc | 2141 | 50 |
| 4 | Chi Limited | 2500 | 58 |
| 5 | Unilever Nigeria | 777 | 19 |
| 6 | Flour mills of Nigeria | 5027 | 117 |
| 7 | Friesland Campina | 1000 | 23 |
| 8 | A & P Foods | 2951 | 69 |
| | Total | 17,133 | 400 |

Source: Annual report of the selected firms, (2022).

The research made use of a close-ended questionnaire. This was done to empower exactness, conveyance and precision in replies by the respondents. Items on the questionnaire were obtained from existing research, such as (Ezebor, *et al.*, 2019; Taven, *et al.*, 2010). The questionnaire was divided into three sections: A, B and C. In an attempt to draw out the required data, sections B and C of the questionnaire were presented in form of a Likert scale with a five-point scale of: Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree. The first section of the questionnaire consists of the biodata, while section B identified questions with a balanced scorecard having four variables of financial, customer, internal processes and environmental viewpoint, and section C carried questions relating to Organizational Performance, which had four variables: innovative, market, product performance and organizational effectiveness. A total number of 400 questionnaires were distributed, and a total of 370 were retrieved. Cronbach's Alpha showed a reliability of 0.851.

3.1. Findings

Table 2 below shows the bio date of the respondents

Table 2. Bio Data Analysis.

| Gender | | Age | | | | Marital Status | | Educational Qualification | | | |
|--------|--------|----------------|----------------|----------------|--------------|----------------|---------|---------------------------|-------|-------------------------------|----------|
| Male | Female | 16-25 years | 26-35 years | 36-45 years | 46 and above | Single | Married | SSCE/A | B.Sc. | Professional Qualification | M.Sc/MBA |
| 222 | 148 | 74 | 253 | 18 | 25 | 141 | 229 | 50 | 117 | 74 | 129 |
| 60% | 40% | 20% | 68.4% | 4.8% | 6.8% | 38.1% | 61.9% | 13.5% | 31.6% | 20% | 34.9% |

3.2. Test of Hypotheses

Hypothesis 1. Financial perspective does not significantly affect product performance.

The smart partial least squared statistical results of hypothesis 1, which looked at the relationship between financial perspective and product performance, are shown in Figure 2 and Table 3 below. According to the findings, the financial perspective significantly impacts product performance.

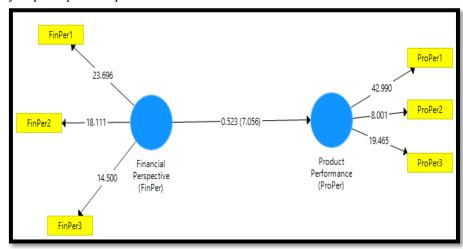


Figure 2. PLS bootstrapping model with β and T values of financial perspective and product performance.

Table 3. Construct validity and reliability for hypothesis 1.

| | Loading | Outer Wei | Outer Weights VIF | | <i>p</i> -Valu | eAVE Composite Reliability | Cronbach's Alpha |
|------------------|-----------------|-----------|-------------------|--------|----------------|-------------------------------|---------------------|
| Constructs | ≥0.7 | | <3.0 | >1.96 | <0.05 | ≥0.5≥0.8 | >0.7 |
| Financial perspe | ective (FinPer) | | | | | 0.65 4 0.849 | 0.742 |
| FinPer1 | 0.825 | 0.366 | 1.446 | 23.696 | 0.000 | | |
| FinPer2 | 0.833 | 0.397 | 1.590 | 18.111 | 0.000 | | |
| FinPer3 | 0.733 | 0.403 | 1.433 | 14.500 | 0.000 | | |
| Products Perfo | rmance (ProBud |) | | | | 0.65 2 0.848 | 0.734 |
| ProBud1 | 0.911 | 0.378 | 1.810 | 42.990 | 0.000 | | |
| ProBud2 | 0.706 | 0.385 | 1.318 | 8.001 | 0.000 | | |
| ProBud3 | 0.793 | 0.387 | 1.579 | 19.465 | 0.000 | | |

Financial perspective, in particular, was found to have a significant impact on product performance (β = 0.523, t-statistics= 7.054 > 1.96, P-value= 0.000 0.05). With a path coefficient of 0.523, the relationship between financial perspective and product performance is moderate and positive. The financial perspective can explain 27.3 percent of the variance in product performance, according to the R² value of 0.273.

Hypothesis 2. Customers' perspective does not significantly affect market performance.

The smart partial least squared statistical results of hypothesis 2, which looked at the relationship between customers' perspectives and market performance, are shown in Figure 3 and Table 4 below. Customers' perspective has a significant impact on market performance.

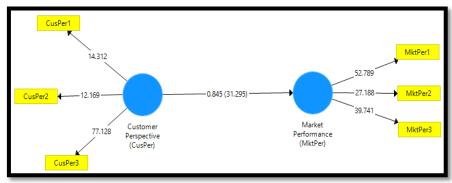


Figure 3. PLS bootstrapping model with $\boldsymbol{\beta}$ and \boldsymbol{P} values of customers' perspective and market performance.

| Table 4. Construct validit | y and reliabilit | y for hypothesis 2. |
|----------------------------|------------------|---------------------|
|----------------------------|------------------|---------------------|

| | Loading | Outer Weights | VIF | t-Statistics p-ValueAVE | | Composite Reliability | Cronbach's Alpha | |
|--------------------|----------------|---------------|-------|-------------------------|-------|--------------------------|---------------------|-------|
| Constructs | ≥0.7 | | <3.0 | >1.96 | <0.05 | ≥0.5 | ≥0.8 | >0.7 |
| Customers P | erspective (Cu | ısPer) | | | | 0.745 | 0.897 | 0.830 |
| CusPer1 | 0.859 | 0.351 | 2.159 | 14.312 | 0.000 | | | |
| CusPer2 | 0.795 | 0.382 | 1.623 | 12.164 | 0.000 | | | |
| CusPer3 | 0.930 | 0.393 | 2.483 | 77.128 | 0.000 | | | |
| Market (MktPer) | Performan | ce | | | | 0.812 | 0.928 | 0.887 |
| MktPer1 | 0.932 | 0.395 | 2.846 | 52.789 | 0.000 | | | |
| MktPer2 | 0.844 | 0.3.95 | 2.219 | 27.188 | 0.000 | | | |
| MktPer3 | 0.924 | 0.391 | 2.816 | 39.741 | 0.000 | | | |

Customer perspective was found to have a significant impact on market performance (β = 0.845, t-statistics= 31.295 > 1.96, P-value= 0.000 < 0.05). With a path coefficient of 0.845, the relationship between customers' perspectives and market performance is considerably high. Customer perspective can explain 71.3 percent of the variance in market performance based on the R² value of 0.713.

Hypothesis 3. Environmental perspective does not significantly affect innovative performance.

The smart partial least squared statistical results of hypothesis 3, which looked at the relationship between environmental perspective and innovative performance, are shown in Figure 4 and Table 5 below. It can be concluded that the environmental perspective significantly influences innovative performance.

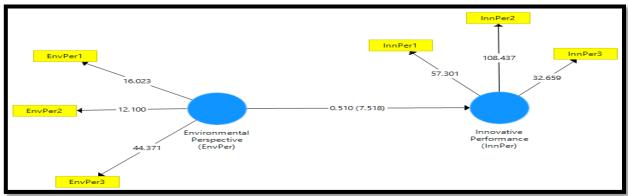


Figure 4. PLS bootstrapping model with β and T values of environmental perspective and innovative performance.

Table 5. Construct validity and reliability for hypothesis 3.

| | Loading | Outer Weights | VIF | t-Statisti | cs p-Value | eAVE | Composite Reliability | Cronbach's Alpha |
|----------------------|------------------|------------------|-------|------------|------------|-------|--------------------------|---------------------|
| Constructs | ≥0.7 | | <3.0 | >1.96 | < 0.05 | ≥0.5 | ≥0.8 | >0.7 |
| Environmenta | l Perspective (E | nvPer) | | | | 0.694 | 0.871 | 0.785 |
| EnvPer1 | 0.847 | 0.351 | 2.171 | 18.023 | 0.000 | | | |
| EnvPer2 | 0.735 | 0.382 | 1.381 | 12.100 | 0.000 | | | |
| EnvPer3 | 0.908 | 0.393 | 1.981 | 44.371 | 0.000 | | | |
| Innovative Pe | erformance (In | nPer) | | | | 0.850 | 0.944 | 0.913 |
| InnPer1 | 0.941 | 0.395 | 2.304 | 57.301 | 0.000 | | | |
| InnPer2 | 0.954 | 0.3.95 | 2.122 | 108.42 | 0.000 | | | |
| InnPer3 | 0.869 | 0.391 | 2.409 | 32.659 | 0.000 | | | |

Environmental perspective was found to have a significant influence on innovative performance (β = 0.510, t-statistics= 7.518 > 1.96, P-value= 0.000 < 0.05). With a path coefficient of 0.510, the relationship between environmental perspective and innovative performance is moderate. The environmental perspective explains 26.0 percent of the variance in innovative performance based on the R² value of 0.713.

Hypothesis 4. *Internal business processes do not significantly affect organizational effectiveness.*

The smart partial least squared statistical results of hypothesis 4, which looked at the relationship between internal business processes and organizational effectiveness, are shown in Figure 5 and Table 6 below. It can be concluded that internal business processessignificantly influence organizational effectiveness.

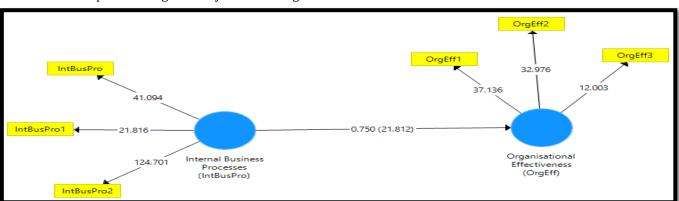


Figure 5. PLS bootstrapping model with β and T values of internal business processes and organizational effectiveness.

Table 6. Construct validity and reliability for hypothesis 4.

| | Loading | Outer | VIF | t- | <i>p</i> -Valu | eAVE | Composite | Cronbach's |
|--|---------------------|---------|-------|-----------|--------------------|--------------|--------------|------------|
| | | Weights | | Statistic | Statistics P value | | Reliability | Alpha |
| Constructs | <u>≥</u> 0.7 | | <3.0 | >1.96 | < 0.05 | <u>≥</u> 0.5 | <u>≥</u> 0.8 | >0.7 |
| Internal business processes(IntBusPro) | | | | | | 0.754 | 0.901 | 0.840 |
| IntBusPro1 | 0.792 | 0.351 | 1.697 | 41.094 | 0.000 | | | _ |
| IntBusPro2 | 0.875 | 0.382 | 2.218 | 21.816 | 0.000 | | | |
| IntBusPro3 | 0.932 | 0.393 | 2.402 | 24.701 | 0.000 | | | |
| organizational | ional effectiveness | | | | | 0.622 | 3 0.832 | 0.711 |
| (OrgEff) | | | | | | 0.023 | 0.032 | 0.711 |
| OrgEff1 | 0.810 | 0.395 | 1.263 | 39.136 | 0.000 | | | |
| OrgEff2 | 0.831 | 0.3.95 | 1.983 | 32.976 | 0.000 | | | |
| OrgEff3 | 0.724 | 0.391 | 1.687 | 12.003 | 0.000 | | | |

Internal business processeswere found to have a significant influence on organizational effectiveness (β = 0.750, t-statistics = 21.812 > 1.96, P-value= 0.000 < 0.05). With a path coefficient of 0.750, the relationship between internal business processes and organizational effectiveness is substantial. Internal business processes explain 56.2 percent of the variance in organizational effectiveness based on the R² value of 0.562.

4. Conclusions and Recommendation

In conclusion, this study is grounded on the findings from the tested hypotheses. It concluded that the financial perspective is critical to reducing operating and administrative costs, increasing financial turnover rate and the reduction in IT operating costs in the selected firms. Therefore, the ability to continuously improve financial turnover and reduce operating and administrative costs could perhaps influence the constant increase in product quality, reduction in the cost of production and constant increase in production speed. Improving customer service after using a balanced scorecard provides an opportunity for improved market performance. To this end, the study concludes that improved customer service, improved external information sharing and improved quality would influence the constant increase in market share, customers' satisfaction and sale of new products in the selected firms.

Furthermore, the study emphasized that the environmental perspective can be used as a platform to drive innovative performance. This is because an eco-friendly working environment, adherence to best practice work patterns and an effective use of raw materials could influence the creation of a new working procedure, proper understanding of administrative systems and constant development of new products in the selected firms. In a related development, internal business processes were also one of the drivers of organizational effectiveness. However, improved productivity, reduced manufacturing cycle time and improved resource utilization will increase organizational effectiveness in the selected firms.

It is recommended that the management of the selected firm should continuously improve and invest in the selected balances' scorecard indicators (financial, customer, environmental and internal processes viewpoint) to drive performance (product, market, innovation and effectiveness) within the firm and also in the conversion of waste to resource.

5. Limitations and Direction for Future Research

The researcher was limited to the information provided by the respondents. More so, the study was focused on the selected firms and so may not be generalized to other industries outside the selected companies. Lastly, the research made use of some variables of balanced scorecard and organizational performance, hence, other variables not used may not give the same result when used.

The selected food and beverage companies were the focus of this research, which means that the findings are limited to the selected food and beverage companies in Nigeria, and they cannot be generalized to other firms in Nigeria. There is, therefore, the need to replicate this research in another sector of the economy. Thus, further research can be carried out using various manufacturing organizations, industries, institutions and NGOs in the country. Additionally, other variables can be used.

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