

INNOVATIVENESS AND ORGANIZATIONAL RESILIENCE OF FOOD AND BEVERAGE MANUFACTURING FIRMS IN SOUTH-SOUTH NIGERIA

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Abstract

This study is an empirical work on the relationship between innovativeness and resilience of food and beverage manufacturing firms in south-south Nigeria. A cross-sectional survey design was adopted, while primary data was collected via the administration of a structured questionnaire. 321 copies of the questionnaire were distributed to the respondents and 297 copies were retrieved showing 93% retrieval rate. Data analysis was carried out with the aid of Statistical Package for Social Sciences (SPSS). The result of the analysis affirmed the alternate hypotheses which stated that innovativeness positively correlates with the measures of organizational resilience. Thus, concluded that innovativeness promotes resilience of the food and beverage manufacturing firms in south-south Nigeria. The study also recommended that organizational work arrangements can be structured to allow for less stringency in supervision so that workers can express themselves in innovative ways; management should be more attuned towards the potentials and creative capabilities of the subordinates and organizational systems can be patterned to link actions with implications for workers in such a manner that workers are motivated to be cautious but yet willing and open to risk taking such that could benefit and advance their position within the organization and also contribute to an overall advantage for the organization.

Key Words: Adaptability, Intrapreneurship, Management of Vulnerabilities, Pro-activeness, Risk-taking, Situation Awareness.

INTRODUCTION

The business environment within most contexts, is highly volatile; oscillating from the constant upheavals of exchange rates and the impact of such on local economies and currencies, to the instability of crude oil price, the seemingly unabated terrorist attacks, international rivalry for market domination and world power (United States of America and China crises, Brexit saga), the recent Corona Virus with its devastating impact on the economy of nations among others. Thus, businesses find it tasking and more demanding to achieve their set goals and objectives, especially in Nigeria where we are constantly faced with the peculiarities of our own myriads of challenges. Hence, the need for organizations to be more innovative in ways that advance their resilience and continuity in business.

The ever-changing business environment has made it imperative for business organizations to reach beyond risk management and move towards a more holistic view of business health and success. These business organizations must anticipate, prepare for, respond and adapt to incremental change and sudden disruptions in order to survive and prosper (James, 2003). These disruptions are often caused by internal and external factors which include but not limited to poor power supply, labour strikes, change in customers' taste and preferences, natural disasters, mismanagement and pilfering, terrorist attacks and kidnapping, poor government policies and so on. This process of anticipating, preparing and responding to the disruptions that spring up in the business environment is what is referred to as organizational resilience.

However, in the midst of all these disruptions, Umoh and Amah (2013) opined that business establishments must strive to make profit and continue to exist no matter the circumstances surrounding them. To survive in uncertain environment and to foster future success, business establishment must be able to handle all of these manifestations of the unexpected. Thus, organizations or establishments must prepare themselves for undesirable circumstances, challenges and possible disruptions, and this preparation is the main ingredient to the organization's resilience (Weick & Sutchliffe, 2001).

Organizational Resilience (OR) is the ability of the organization to effectively respond to inevitable disruptive change that may occur in or outside an organization (Joseph et al, 2009). It is a strategic imperative tool every business establishment needs to prosper in today's dynamic and interconnected world. Firms need to develop a resilience capacity which enables them to adequately react to unexpected events and to capitalize on events that could potentially threaten their organization's continuity (Lengnick-Hall et al, 2011).

Studies have identified the need for innovativeness as a key factor necessary and imperative for addressing organizational change and high competition within markets, yet a limited number of studies exist which have actually addressed the manifestations of these factors especially within the boundaries of established firms or business brands. Nnamdi (2017) stated that while it is easier for SMEs to amend and innovatively reconfigure their practices to suit the changes within their environment given their sizes, most popular and well-established brands find this challenging and in this regard are often berated by the growing advancements and competition which pervade their industries.

The food and beverage manufacturing industry is a key contributor to the Nigerian economy, with an estimated contribution of over 10% to the nation's gross Domestic Product (GDP) and taxes running into billions of naira. The industry also collectively provides employment for

over 500,000 (five hundred thousand) people at the processing and retailing level. However, studies have consistently outlined numerous service gaps and challenges facing the food and beverage manufacturing industry; these service gaps and challenges according to Mcmanus (2008) are highly contentious and suggest poor levels of organizational situation awareness and adaptability to its environment.

Studies identify some of the major challenge militating against the smooth operation of these food and beverage companies as the lack of constant power supply (where 30% of the gross profit made by the companies is used to service power supply), insecurity, multiplicity of taxes and levies by government agencies (occasioned by the overlapping functions and lack of coordination amongst such regulators) thus, leading to problems reflected by heavy financial burden on food and beverage manufacturing companies. Apart from the aforementioned, these companies are faced with challenges and disruptions that are both internal and external. These in most cases lead to poor returns, poor service delivery and high rates of employee turnover due to delayed compensation and inadequate employee welfare.

Based on the foregoing and the observed imperatives of intrapreneurship in the functionality of organizations, this study therefore investigates the relationship between innovativeness and organizational resilience of food and beverage manufacturing firms in the South-South of Nigeria.

Research Questions/Hypotheses

The following research questions address the features of the relationship between innovativeness and organizational resilience:

- i. Is there a significant relationship between innovativeness and adaptability of food and beverage manufacturing companies in South-south Nigeria?
- ii. Is there a significant relationship between innovativeness and situation awareness of food and beverage manufacturing companies in South-south Nigeria?
- iii. Is there a significant relationship between innovativeness and management of vulnerabilities of food and beverage manufacturing companies in South-south Nigeria?

The study was guided by the following null hypotheses:

HO₁: There is no significant relationship between innovativeness and adaptability of food and beverage manufacturing companies in South-south Nigeria.

HO₂: There is no significant relationship between innovativeness and situation awareness of food and beverage manufacturing companies in South-south Nigeria.

HO₃: There is no significant relationship between innovativeness and management of vulnerabilities of food and beverage manufacturing companies in South-south Nigeria.

LITERATURE REVIEW

Innovativeness

Innovativeness is instrumental to the success of organizations especially where individuals in the firm go out of their way to identify the best way to satisfy the needs of their customers. Darroch and McNaughton (2002), asserts that innovativeness offers the best tools that can

help firms to remain competitive in the ever-evolving business environment. Today's customer is demanding unique products that have been customized to meet individual needs and sales solutions that create a long-lasting relationship.

The adoption of creative and innovative methodologies is a common characteristic among performing employees. As such, innovation becomes the backbone of intrapreneurship (Nkosi, 2012). Several authors have found a positive correlation between innovativeness and IO. Bradmore (1996), found out that innovation facilitates organizational performance via effective implementation of new ideas. Neely and Hii (2014) opined that innovation strengthens the firm's competitiveness and generally improves the internal capabilities of the organization and hence makes it more adaptable to change and market pressure unlike non-innovative firms.

Innovativeness is the mean and process through which innovation is achieved and known as a determinant of performance (Pesamaa, Shoham & Ruvio, 2011). Rogers described "innovativeness is the degree to which an individual or other unit of adoption is relatively earlier in adopting new ideas than any other member of the system and as such "innovativeness" indicate behavioural change. The long-term success of firm depends on its capability in maintaining sustainable innovation. However, there is gap in literature about what constitute innovation capabilities in organization and how it can be developed and make sustainable.

Lawson and Samson (2001) define innovativeness as "the ability to continuously transform knowledge and ideas into new products, process and systems for the benefit of firm and its stakeholders" Their study conclude that innovativeness has seven aspects. These include vision and strategy, harness the competence base, organizational intelligence, creativity and idea management, organizational structure and systems, culture and climate, and the management of technology. Therefore, innovativeness is considered combination of factors internal and external to organization which makes firm ability to innovate. Innovativeness is internal to organization as it's the factor over which management has considerable control. As described earlier Drucker (1985) stressed the importance of innovativeness, he declined the innovation as inspirational rather described it as outcome of hard work. The very survival of firm depends on the innovativeness as it helps managers to devise solution to business problem and come out with new thing which is effective and contribute to business performance.

Innovativeness is major source of competitive advantage to contemporary organization. Per se a competitive advantage means performance sustain over time and will determine how the firm is different vis- à- vis its competitors (Hurly & Hurt 1998). Porter (1990) concludes from its four years research of ten important trading countries that nation competitiveness depends on the capacity of its industry to innovate and upgrade. As an example, he explains that having strong domestic rival puts great pressure on companies making them to come up with better way of doing things. He argued that the creation and assimilation of knowledge had changed the fundamentals of competition.

Innovativeness is thus associated with culture that emphasizes learning. Firm culture is one such important determinant of learning in an organization. For instance, hierarchical structure does not promote the learning while the less bureaucratic, open culture and participative style of decision making always advance learning in an organization. Learning orientation amongst the industry players creates an environment of interaction, which makes the firms at local

level to understand from each other experiences. Learning helps in gaining competitive advantage and learning is more crucial in technological firms. According to Argyris and Schon (1978), organizational learning will enhance a firm innovativeness, especially in knowledge intensive industries. The literature also emphasizes learning as a critical factor in building organizational capability. Collis (1996) suggest two critical factors the ability to innovate and the ability to learn in building organization capabilities. He describes the organization capabilities as “the firm’s dynamic routines that enable it to generate continuous improvement in the efficiency or effectiveness of its performance of product market activities”.

Organizational Resilience

Mafabi et al. (2012) noted that organizational resilience refers to a business ability to adapt and evolve as the global market is evolving, to respond to short-term shocks and to shape itself to respond to long-term challenges.” Resilience is the capability of an organization to be able to react to the changing demands of the business environment. Failure of resilience can be seen as losing vision, mission and mandate. (Mafabi et al. 2012.) One way of describing resilience could be “keep going no matter what happens”. This can also be viewed as consistency.

Ihab and Salman (2015) and Sutcliffe and Vogus (2003) share the view that resilience is not about only surviving or coping. At organization level, resilient are those, who are continuously and pro-actively able to adjust and adapt to challenging and changing conditions. (Ihab & Salman, 2015; Sutcliffe & Vogus, 2003). There are two leading perspectives to the definition of organizational resilience in academic literature. In transactional view, resilience is seen as a capability to rebound from a crisis or another adverse situation and continue after as it is.

If organizational resilience is seen as a bounce-back capability, the focus is on finding coping methods by which the organization is able to get back on track to what-used to-be performance. This rebound-oriented perspective on organizational resilience emphasizes the importance of adaptability as an enabler to react to unexpected changes. Second perspective is to look at organizational resilience as an ability to keep up with continuous changes. In this case resilience is seen as thriving. Organization is able to take advantage of on unanticipated change and develop new capabilities. Instead of returning to already established performance, resilience is an ability for an organization to benefit of its resources and capabilities, exploit opportunities and build successful future. This view sees resilience as a dynamic capability, which can be deliberately developed. The latter view on organizational resilience is called transformational view (Lengnick-Hall et al. 2011, 244).

One approach is to split organization’s capability to response to change into vulnerability and resilience. In this approach, developed by Gaillard, vulnerability can be viewed as the acceptance of crisis and represents exposure of people and organizations to suffer and consequently transforming minor incidents into disasters. Resilience, on the other hand, represents the levels of tolerance and draws on the techniques adopted to cope with hard times to survive. Pelling (2003) defined resilience as the ability to cope with or adapt to risk or crisis to survive and reduce damage. Therefore, resilience can be considered to be the positive side of vulnerability (Ihab & Salman, 2014; Mallack, 1998).

Adaptability

Adaptability is also a term that has emerged from several different disciplines. Luers et al (2003) introduce the concept of adaptability into their vulnerability assessment of agricultural systems in Mexico. Adaptability, the authors argue, is a significant factor in characterising vulnerability and may be defined as ‘the extent to which a system can modify its circumstances to move to a less vulnerable condition. The concept of adaptability is also at the core of current business continuity strategies. Adaptability is defined by Starr et al (2004) as the ability of an enterprise to alter its ‘strategy, operations, management systems, governance structure and decision-support capabilities’ to withstand perturbations and disruptions.

Adaptability reflects the ability of the system to respond to changes in its external environment, and to recover from damage to internal structures within the system that affect its ability to achieve its purpose. The response of a system to change can arise organically, reflecting the self-organising capacity of the system, or more mechanistically. Within organisations, these two spectrums can both be observed. For example, the crisis management structure of some organisations tends towards a more mechanistic command-and-control type structure, where the response of the system is directed and co-ordinated through formalised communication channels. By contrast, other organisations are more organic, exhibiting diffuse communication (utilising personal relationships as effective communication channels), decentralised decision making, and influence and power based on expert’s knowledge rather than on formal authority (Knowles and Saxberg, 1988).

Situation Awareness

Situation Awareness is the ability to identify products, processes, and administrative capabilities and follow serious features of evidence around the happenings to the organization with regards to its vision and mission. Understanding what is happening within the organization is very important and it is seen as a strong leadership quality. When organization loses its situation awareness, it increases the potential for human error and mishaps (Seville, 2013). According to Naylor (1999), effective organization situation awareness depends on the composition of its members developing accurate expectations for organizational performance by drawing on a common knowledge base. This process involves anticipate the needs of organization members; predict the needs of organizational members; and adaptation to efficient demand of organizational task.

Management of vulnerabilities

Within the context of disasters, vulnerability is generally described as the human product of any physical exposure to a disaster that results in some degree of loss, combined with the human capacity to withstand, prepare for and recover from that same event. It describes the relative degree of ‘risk, susceptibility, resistance and resilience’ to a hazard event or disaster (McEntire, 2001). Individual research disciplines tend to adopt definitions of vulnerability that explicitly suit their own needs. While the study of vulnerability began with the social sciences, the applications have reached far into economics, geophysical sciences, information systems, environmental science and politics, and include organisational management and policy decisions. Vulnerability is inherently complex, and is not a static entity. There is a spatial-temporal element to vulnerability research in which different aspects of vulnerability become dominant at different times and in different places (Webb et al, 2002; Luers et al, 2003; Stephen & Downing, 2001; Chang & Falit-Baiamonte, 2002).

Innovativeness and resilience

The positive relationship between innovativeness and organizational outcomes such as performance and resilience has been shown in a number of empirical studies. In a study of 845 Canadian Manufacturing Firms Thornhill (2006) find out this relationship holds true. This study of Thornhill (2006) yielded three important findings in relation to innovation. First industry level dynamism is positively related with innovation. The dynamic industry has very limited life cycle of product and continuous innovation is required to maintain share in the industry.

The example of cellular phone development industry is relevant here. The hyper competition in this industry compels players to aggressively pursue for innovative products. Second innovation is positively associated with the firm performance. This relationship is unrelated and not affected by the dynamic nature of industry. The innovation leads to first mover advantage and distinct competitive positioning. Porter (1998) in his book *Competitive Advantage* states that a firm can pursue both low cost and differentiation strategy when it pioneers innovative product. The third finding of the research of Thornhill is that firm knowledge, industry dynamism and innovation interact in a way that influences firm performance.

In high tech firms where knowledge assets are high, innovative new products have the greatest impact on revenue growth. Baldwin and Johnson (1996) in their study of Canadian firms also showed the significance impact of innovation on a wide variety of business performance measures, including market share gain and return on investment. Dwyer and Mellor (1993) in their studies of Australian firms found out that firms adopting technical offensive strategy had the highest level of performance in term of meeting their performance objectives, profitability of their new product projects and perceived overall success.

Salavou (2002) also found that product innovation was a significant determinant of business performance based on Return on Asset (ROA) in his studies of SMEs in Greece in food industry. The above referred empirical studies shows considerable evidence of positive relationship between innovation and organizational outcomes, especially from the manufacturing sector of most developed nations, whereas literature lacks much work on the impact of innovation on outcomes such as resilience within developing African nations such as Nigeria. Cainelli et al. (2006) mentioned that this lack of research is due to difficulty in obtaining macro level data, which is well obtainable in developed nations but less in developing contexts. For instance, Cainelli et al. (2004) in their studies conclude that firm resilience in most African manufacturing industry not only depend on innovation but also on the of financial resources pledged for innovation as well as on the type of innovation activity performed.

Hult, Hurley, and Knight (2003) in their study on Innovativeness, its antecedent and impact on business resilience and performance address three research questions. (1) Why are some industrial firms more innovative than others? (2) What effect does innovativeness have on business behaviour? (3) Does the linkage between innovativeness and business outcomes depend on the environmental context? Based on these research questions a model was prepared and tested which also showed that the innovativeness is an important driver of organizational as well as business actions and behaviour.

METHODOLOGY

The study adopted a cross-sectional survey design. The target population for this study was all food and beverage manufacturing firms in Nigeria; however, given the highly uncertain and poor regulation of existing manufacturing setups and units that pervade the food and beverage sector of the manufacturing industry, an accessible population of 1614 managers and supervisors from the 6 registered food and beverage companies in the South-South States of Nigeria (Akwa Ibom, Rivers, Cross Rivers, Bayelsa, Delta and Edo State) listed on the Manufacturers Association of Nigeria (MAN) 2018 directory was used for this study. A sample size of 321 was used for this.

DISCUSSION OF FINDINGS

The relationship between the variables – innovativeness and the measures of organizational resilience (adaptability, situation awareness and the management of vulnerability), are revealed to be significant. The results show that innovativeness significantly contributes and enhances outcomes related to organizational resilience such as adaptation (with $\rho = 0.634$ and $P = 0.000$), situation awareness (with $\rho = 0.505$ and $P = 0.000$) and the management of key vulnerabilities (with $\rho = 0.487$ and $P = 0.000$).

The evidence on the relationship between innovativeness and the measures of organizational resilience demonstrates the imperatives of innovativeness in advancing positive organizational outcomes. Innovativeness in this sense advances positive attributes which further impact substantially on the robustness of the organization. Robbins and Coulter (2006) described innovativeness as the process of taking creative ideas and turning them into useful products or work methods. This is in contrast to invention which was defined by these authors as the process of developing new ideas. Parashar and Singh (2005) noted that innovativeness detailed the ability to combine two or more knowledge. Tran (2008) on the other hand viewed innovativeness as the creative and commercial embodiment of organisational learning. Lim et al (2010) observed that innovativeness reflects radical breaks, and potentials in the originality of the organization that drive its change or competitiveness. They viewed innovativeness within the context of manufacturing industries as a means of developing and sustaining core competencies through development of internal capabilities, set ups of research and development R&D departments and strategized research scopes and investments.

CONCLUSION AND RECOMMENDATIONS

Innovativeness as a feature of individuals within the organization is essential for organizational resilience as it significantly advances creative solutions in the functions of the organization in such a manner that enhances the organization's level of adaptability, situation awareness and management of vulnerabilities.

The relationship between innovativeness and organizational resilience is established herein as significant and positive in the sense that it is positively impacting and facilitating resilience features such as adaptability, situation awareness and the effective management of key vulnerabilities. Thus, in line with the findings of this study, the following recommendations are put forward:

- i. Organizational work arrangements can be structured to allow for less stringency in supervision so that workers are able to express themselves in innovative ways and

also be accountable for their actions and behaviour, such that their confidence and trust in their creativity and innovativeness is directly linked to their success and their contributions to the organization.

- ii. Management should be more attuned towards the potentials and creative capabilities of their subordinates and should be more flexible with regards to shared responsibilities and roles such that workers are offered the required opportunities and platforms to be pro-active in their roles and responsibilities.
- iii. Organizational culture through its policies can be modified and patterned to reinforce and strengthen its innovative activities and also harness as well as effectively channel creativity and ideas within the organization in such a manner that effectively matches its resilience needs or necessities.

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Appendices

Table 1: Study population and sample distribution

| Firms | Population | Distributed |
|--|-------------|-------------|
| 3nity Foods Nigeria Limited | 85 | 17 |
| Dufil Prima Foods Ltd | 191 | 38 |
| Coca-Cola Nigeria Limited | 523 | 104 |
| Nigeria Breweries Plc | 588 | 117 |
| Cway Food & Beverages Nigeria Co. Ltd. | 91 | 18 |
| Bua Sugar Refinery Limited | 136 | 27 |
| Total | 1614 | 321 |

Source: www.manufacturersnigeria.org

Table 2: Relationship between innovativeness and measures of organizational resilience

| | | Innovative | Adapt | Aware | Vulnerable |
|----------------|----------------------------|------------|--------|--------|------------|
| Spearman's rho | Correlation Coefficient | 1.000 | .634** | .505** | .487** |
| | Innovative Sig. (2-tailed) | . | .000 | .000 | .000 |
| | N | 297 | 297 | 297 | 297 |
| | Correlation Coefficient | .634** | 1.000 | .636** | .650** |
| | Adapt Sig. (2-tailed) | .000 | . | .000 | .000 |
| | N | 297 | 297 | 297 | 297 |
| | Correlation Coefficient | .505** | .636** | 1.000 | .629** |
| | Aware Sig. (2-tailed) | .000 | .000 | . | .000 |
| | N | 297 | 297 | 297 | 297 |
| | Correlation Coefficient | .487** | .650** | .629** | 1.000 |
| | Vulnerable Sig. (2-tailed) | .000 | .000 | .000 | . |
| | N | 297 | 297 | 297 | 297 |

Source: Data output, 2020