HOW INNOVATION CULTURE AFFECTS CORPORATE PERFORMANCE: A LITERATURE REVIEW

Zeb-Obipi, Isaac

Department of Management, Faculty of Management Sciences Rivers State University, Port Harcourt <u>zeb-obipi.isaac@ust.edu.ng</u>

and

Maduabuchi, Chinyere Emeka

Department of Management, Ignatius Ajuru University of Education, Rumuolumeni, Port Harcourt <u>chinyereemeka10@gmail.com</u>

ABSTRACT

This study examined the relationship between innovation culture and corporate performance through a literature review. The objectives of the study were to examine how dimensions of innovation culture such as product innovation, process innovation and administrative innovation affect three dimensions of corporate performance such as product quality, time minimization and waste minimization. The dominant literature on the subject suggests that innovation culture enhances corporate performance. It concluded that innovation is a key determinant of corporate performance. Consequently, the study recommended that organizations should create the culture of innovation in order to be able to offer new products, modify existing ones and make them user friendly to customers. They should improve their innovative processes involving materials, technology and other resources to improve product quality and to be time and cost efficient. Organizations should establish new ways of doing things in administration to enhance corporate performance.

Keywords: Innovation, innovation culture, product innovation, process innovation, administrative innovation, corporate performance, product quality,

time minimization, waste minimization.

INTRODUCTION

As the business world becomes increasingly complex and still more astonishingly competitive, companies are turning to innovation as one of the few durable sources of competitive advantage. Innovation is now among the top priorities for the majority of the worlds' large companies (Morris, 2007). Innovation can be used to generate dynamic capabilities to manage changes in the organization's environment and to gain first-mover advantages or react speedily to market changes (Cohen & Levinthal, 2009). The significance of innovation reveals that innovative companies have higher levels of productivity than less-innovative ones. Thus, innovation is critical to the competitiveness and survival of organizations (Harris, 2002).

Organizations with innovative culture manifest breakthroughs, useful incremental changes, and even extremely new ways of doing business very frequently and regularly. The concept of regularity is a good test to see if a company really has an innovation culture. How regularly interesting new ideas, concepts, products, or services are provided? If new stuff seems to be coming out all the time, in different ways, and if the internal discussion in the organization is focused largely on innovation, then it is likely that an innovation culture exists there. The bottom line is that such a culture is expected to affect the performance of organizations. This study, therefore, examined the relationships between innovative culture and corporate performance. While innovative culture was measured in terms of three (product, process, & administrative) the dimensions of corporate performance used were product quality, time minimization, & waste minimization. The envisaged relationship between innovation culture dimensions and corporate performance suggested the following research objectives that sought to examine how:

- (1) product innovation influences corporate performance.
- (2) process innovation affects corporate performance.
- (3) administrative innovation influence corporate performance.

LITERATURE REVIEW

Concept and Dimensions of Innovation Culture

The concept of innovation has been defined in many different perspectives by various scholars. Innovation implies the generation and implementation of new

ideas, processes, or products (Rifat, Meltern & Gultekin, 2016). Thompson (2005) defined innovation as 'the generation, acceptance & implementation of new ideas, products, processes or services'. It also entails successful implementation of creative ideas within an organization. In short, the core of innovation is the newness of an idea that in turn improves corporate performance (Camisón-Zornoza, 2004). It is generally viewed as any idea, object or practice that is perceived as new by members of a social system (Rogers, 2003), and as such encompasses both internally generated and externally embraced changes in technology, products, programs, processes, and systems, including administrative and organizational practices, among other possible changes that are new to an adopting organization.

Innovation culture has been seen as that culture that makes innovation a daily way of life and in which new ideas new ideas is generated, valued and supported (Losane, 2013; Streets & Boundary, 2004). Rousel (2018) defined innovation culture as the work environment that leaders cultivate in order to nurture unorthodox thinking and its application. Investopedia (2018) defined innovation culture as a culture that promotes creativity and development of innovation within the company. It entails the expression of people, their past, and their current beliefs, ideas, and behaviours that make innovation happen (Moiseer & Koroleva, 2012). When a firm's innovation culture is strong, it has the tendency to uphold the marketing strategies and nurture the generation of new ideas and services in order to satisfy the customer.

From the above conceptions, innovation culture could be defined as the way of doing things in an organization that allows for new ideas or adaptations in its products, process and administration. This definition provides and suggests three dimensions of innovation culture employed in this research. Rogers (2003) adopted comparability, complexity, and observe ability as the dimensions of innovation. Koellinger (2008) asserted that product, process and marketing innovations are the dimensions of innovation. For the purpose of this study, the dimensions of innovation as posited by Daft (2000,1998) were considered appropriate as implied in the operational definition of innovative culture; and they were: (a) Product, Innovation, (b) Process Innovation and (c) Administrative Innovation.

Product Innovation

A product can be viewed as an item or offering offered to the customer in order to

satisfy the customer's needs or want. Product innovation according to Rogers (2003) means introducing new products/services or brining significant improvement in the existing products/services. Spacey (2017) sees product innovation as a development and launch of a product or services that improves things by 10 times or more. Product innovation is a process of introducing new products into an organisation in order to enhance quality of services and improve its performance. For product innovation, the product must either be a new product or significantly improved with respect to its features, intended use, software, user-friendliness. The first digital camera and micro-processors are examples of product innovation. Product innovation can be manifest in: (i) introducing new products, (ii) modified product and (iii) user-friendly product.

Process Innovation

Process innovation means improving the production and logistic methods significantly or bringing significant improvements in the supporting activities such as purchasing, accounting, maintenance and computing (Polder, 2010). OECD (2005) defined process innovation as the implementation of the production or delivery method that is new or significantly improved. These include significant changes in techniques, equipment and or software. Process innovation is concerned with introducing new elements into an organization's operation such as inputs, materials, task specifications, work and information flow mechanisms, equipment used to produce product or render service (Timur & Antanas, 2017). It entails firms bringing novelties in the production and delivery methods to bring effectiveness and efficiency in the business. Thus, process innovation was conceptualized as a process of bringing significant improvement in the inputs or materials, equipment or machines, techniques or technology and production stages or procedures to enhance organizational effectiveness and efficiency. Its indicants used in this study were: (i) material innovation, (ii) technique innovation and (iii) procedure innovation.

Administrative Innovation

Administrative innovation is defined as introduction of new practices of doing business, workplace organizing methods, decision making system and new ways of managing external relations (Polder, 2010). OECD (2005) defined administrative innovation as implementing new ways of organizing business practices, external relations and workplace. Administrative innovation is a new way of organizing routine activities. In view the of Requia (2014), administrative innovation is the implementation of a new organizational method in the firm's

business practices, workplace organization or external relations. For administrative innovation, firms change the method of organizing that they have not implemented before. They change the ways of organizing things to compete with their competitors and satisfy the customers (Ettlie and Reza, 2012); including changing their setup. Through administrative innovation performance can be increased given the resultant decrease in transaction and administrative costs. According to Greenan (2003), administrative innovation is seen as involving changes in the ways decisions are taken, responsibilities are allocated and information and communication are structured within an organization. Hence the indicators of administrative innovation for this study were: (i) decision changes, (ii) responsibility changes and (iii) information changes.

Concept and Dimensions of Corporate Performance

Corporate performance is analysed through the use of a subset business analytics or business intelligence, that is concerned with the evaluation of the health of an organization, and is traditionally measured in terms of financial performance (Rouse, 2018). However, many researchers have argued that corporate performance cannot be measured with any single universal indicator, rather a compendium of indicators that include profitability, productivity, adaptability, growth, innovation, effectiveness and efficiency should be used (Zeb-Obipi, 2015; Harrim, 2010). Besides, performance could be estimated in both subjective and objective methods such as financial and non – financial indicators (Kaplan and Norton, 1992) In addition, Zehir and Karaboga (2015) stressed that financial performance indicators are weak due to manipulations that reflect changes in competitive environment, as such recommends that non – financial performance indicators be used to fill the gap. Zeb-Obipi (2015) considered corporate performance to be measured in terms of product offering and resources utilization. From these, he advanced six measures of productivity: output level, product line and product quality (for product offering as definitive of effectiveness-achievement of set targets), cost minimization, time minimization and waste minimization (for resource utilization as definitive of efficiency- achieving set targets with minimum resources). Three of these were employed in this study; namely: product quality, time minimization and waste minimization

Product Quality

A product can be defined as any offering that can satisfy a need or want (Kotler in Zeb- Obipi, 2015). He described it as the most basic tool in marketing. He

asserted that customers would judge a product based on three elements: (i) product features and quality, (ii) service mix and quality, and (iii) price appropriateness. A product can also be seen as anything that can be offered to a market for attention, acquisition, use or consumption that might satisfy a want or need. The performance of any organizations depends on the quality of products they produce. The better the product is produced and useful, the more consumers will enjoy it; especially if it meets their daily needs (Romdonny & Rosmadi, 2018). The quality of products that is in great demand by consumers can be seen from several factors including packaging, price, quality, and benefit obtained by consumer (Almaamari, Hashemi, Bassam & Abdo, 2017). A good product quality will have a great impact on increasing customer's loyalty and revenue for the organization. More so, Johnson, Ignatius & Chinyere (2018) assert that the survival of any business to a great extend depends on the service quality or quality service delivery and that quality service is important for any business in order to survive and succeed. Consequently, product quality is conceived as the degree to which a product satisfies customers want in terms of product rating, having zero defects and lowered error detection. Hence the adoption of three indices of product quality identified by Zeb-Obipi (2015): (i) percentage of defects, (ii) customer product rating, and (iii) Error detection.

Time Minimization

Time minimization as a measure of corporate performance means the degree to which organization reduces the total time spent in delivering a particular product or service; and depicts the fast and timely design, execution, response and delivery of results (Zeb-Obipi, 2015). He opined that time and speed are very vital measures of performance, as such organizations seek to maximize speed and minimize time in order to achieve targets and gain competitive advantage over rival firms. Considering the above definition and descriptions, it is obvious that many competing businesses today do not only fight for quality but also for time to meet market demand. Time is an essential element for every individual, group, and organization because it is used to employ other resources towards the attainment of a given goal (Loveday, Chibuzor & Kingsley, 2016). Effective time management enhances the performance of any organization (Morgenstern, 2010). Humes (2012) asserted that organization cannot excel without the employment of effective time management. The goal of time management is to maximize output with minimum input. Moreover, a delay in making a decision or reacting to a problem can be a costly business mistake where actualization of goals and objectives could be distorted. All objects begin, develop and end in

time and that holds true not only for us, the human beings, but also for the stars and the universe (Zakari, & Owusu-Ansah, 2013). The minimization of time entails the successful use of limited time to achieve stated objectives and Zeb-Obipi (2015) has identified three indices of time in minimization: (i) design to market time (ii) product delivery time, and (iii) Job completion Time.

Waste Minimization

Waste minimization in the context of corporate performance is the act of reducing the level of waste or wastages in the production of goods or services. Waste or wastages refers to the less than maximum use of resources in the production process or service delivery (Zeb-Obipi, 2015). He argues that organizations embrace waste minimization because with fewer mistakes, fewer delays and better use of machine time and materials, performance will improve and wastages will be minimized. Prajogo (2006) defined waste minimization as a practice or process through which the quantity of generated waste is reduced with the main objective of producing the least of unwanted by-products through the optimal use of raw materials, water and energy. As Hitt (2001) argued, strategic competitiveness can best be achieved by firms through waste minimization. It supports any company's aim for a "Clean technology" production which means full utilization of resources, cost savings in storage, treatment and disposal of generated waste by reducing its volume and its strength or concentration, improves environmental compliance, ensures profit, and promote corporate good image (Ojo, 2014). Armstrong (2012) opined that waste management helps firms to evaluate its productivity performance in the business. Waste minimization in this context can be defined as the organizations ability in reducing idle capacity, excess items and quality failure; and from this definition emerges Zeb-Obipi's (2015) measures of waste minimization: (i) quality failure, (ii) idle capacity and (iii) excess items.

Innovation Culture and Corporate Performance

This study focused on extending the knowledge about innovation culture and its impact on corporate performance and introducing meaningful relationships. The evidence from earlier studies about the impact of innovation culture on corporate performance have so far yielded important findings. These findings show that innovation influences corporate performance. Innovation has impact on a firm's performance.

Our first research objective was intended to ascertain how product innovation

influences corporate performance. A study conducted by Hami and Muhammed (2014) analysed the influence of innovation on manufacturing firms in terms of productivity, sales growth and employment growth. Results showed that innovation had significant effect on the productivity and employment growth which enhance performance. James (2013) reviewed product innovation and corporate performance in selected firms in Nigeria. The paper examined how performance outcomes of organizations have been influenced by their product innovation strategies. The study was correlational and it concluded that product innovation has been proven to strongly influence competitiveness, profitability, productivity etc. Thus corporate firms are advised to innovate in order to achieve their organizational goals. Udegbe and Udegbe (2013) investigated the impact of product development and innovation on organizational performance. The data was collected from the marketing managers, operation managers and those managers who have been involved greatly in product development and innovation process. The findings show that the impact of product development on organizational performance was higher in Nigeria when consumers perceive product innovation as stronger, more favourable and more unique. Therefore, it was recommended that innovations should be maintained continuously to develop appropriate product continually.

Our second research objective was to examine how process innovation influences corporate performance. Nyamoita (2013) investigated the effect of process innovation on corporate performance in utility companies in Kenya. The study recommended that there was need for government to foster innovation among the utility companies which was in turn expected to improve revenue collection, improve utility billing and accuracy, reduce unnecessary costs and be more competitive in the market. Koellinger (2008) investigated the relationship between the usage of internet based technologies, different types of innovations and performance at the firm's level. The results revealed that internet based innovations are most likely to grow more than non- internet based ones. Orkun, Ozlem, Adnan & Ali (2013) set out to determine the links between technological innovations capabilities (TICs) and business performance. They found that different TICs have different impacts on different performance measures.

The third research objective was concerned with how administrative innovation influences corporate performance. Mabrouk (2011), in a study on dynamics of administrative innovation and performance of banking firms, analysed the effects of the adoption of two types of financial innovations, product innovation

(telephone banking, sms banking) and process innovation (magnetic strip cards-ATMS, debit, credit, automated cash dispenser and electronic payment terminal) on the performance of banks. They found that financial products innovation improves profitability while process initiation has a positive effect on profitability and efficiency of the banks. Banks that imitate are less profitable and less efficient than first movers, those who first initiate an innovation. Zaied (2015) did a study on relationship between organizational innovation, internal sources of knowledge and organizational performance. The result was that there was no relationship between internal and external sources of knowledge with organizational innovation and organizational performance. This was because Tunisian companies do not have specific departments for research and development and there was lack of investment in innovation. Nilakanta and Gulati (2006) found that administrative innovations led to improvements in organizational efficiency, while technological innovations led to improvements in both organizational efficiency and organizational effectiveness. Indeed, firms get involved in administrative innovation to enhance effectiveness and efficiency in the business.

CONCLUSION AND RECOMMENDATIONS

This paper looked at the effectiveness of innovation culture as a tool to enhance competitive advantage and improve organizational performance. Innovation is a strategy that is widely accepted by most organizations in contemporary economies. It has been observed that innovation enhances corporate performance through the association of its dimensions and those of corporate performance. Organizations that engage in innovation in terms of their products, processes and administration enjoy better performance evident in the quality of their products, less time they use and less wastages they experience; and these are very essential under the present competitive environment. The conclusion from these is that innovation culture is a key determinant of corporate performance. Therefore, every company seeking competitiveness and improved performance should consider the cultivation of appropriate innovation culture.

In order to sustain a competitive edge in today's market, corporate managers have a twofold mission of continuously generating extra value for their customers whilst thriving to cut costs and increase their productivity. To make this mission possible, the results of this study suggest that business leaders of the firms should give additional importance to different types of innovation culture for attaining high organizational performance. Moreover, the results of this

study also suggests that business leaders should: first allocate responsibility down the organization, secondly, recognize their pivotal role in managing or orchestrating innovation engagement themselves and thirdly, ensure the organization structure is fully in place to implement well-articulated innovation strategy.

Managers should pay more attention to organizational innovation as it not only significantly relates with other innovation types but also has a stronger positive impact on innovative performance. Innovative performance is the main vehicle to convey the positive effects of innovation types to market, production & financial performance. Market performance in shape of customer satisfaction, sales and market share can be enhanced through innovative performance, hence, it should be given due importance. Other specific recommendations that emanated from the study's conclusions and implications were:

- 1. Organizations should create product innovation culture for new products, modifications existing ones and making products more user friendly for an improved performance.
- 2. They should encourage process innovation by making better use of materials, technology and other resources to achieve higher performance.
- 3. They should have the ability to create new ways of doing things in their decision making, responsibility allocations and information communication through administrative innovation capable of enabling them attain their desired level of performance.

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