

ENVIRONMENTAL TURBULENCE AND ORGANIZATIONAL PERFORMANCE OF FOOD AND BEVERAGES FIRMS IN RIVERS STATE NIGERIA

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Abstract

This work investigated if environmental turbulence relates significantly with performance of food and beverages firms in Rivers state, Nigeria. The cross sectional survey was utilized and a total population of one hundred and forty-two (142) managers and supervisors drawn from twelve (12) food and beverages firms were covered as the population of the study. A census study was carried out because the population was relatively small and could be effectively managed by the researcher. Questionnaire was used in collecting data from respondent. From the total 142 questionnaires that were distributed, only 127 questionnaires were successfully retrieved and used for the study. Data was analysed using the spearman rank order correlation. The outcome revealed that market turbulence, technology turbulence, competition turbulence and regulation turbulence have a negative relationship with organization performance. It was thus concluded that Inability of firms to adapt promptly to the proliferation in the turbulent environment is the major rationale for the collapse or failure of many establishments. The study recommended that the managers of the firms should develop high level of dynamic capability in their operations in order to stay agile and thus adapt rapidly to

any form of turbulence in the business world.

Keywords: Competition Turbulence, Market Turbulence, Organizational Performance, Regulation Turbulence, Technology Turbulence.

1.0.Introduction

The proliferation of mortality rate of most organizations coupled with the imponderable nature of the business environment has led to the dare need to increase the performance of organisation. The performance of organization has over the years been acknowledged as the ‘engine and life blood’ of any competitive firm. This is true owing to the indisputable fact that an organization that has low performance is bound to fizzle out within the nearest future. The performance of the firm determines their position in the industry. This implies that organizations are rated as market leaders or followers based on their various performance in the industry. It is however worthy to note that the number of years a firm has been in existence and their acquired sophisticated technology do not guarantee their performance in this era that is characterised by high volatility, uncertain, complexity and Ambiguity (VUCA) in the

global business world. Performance has long been a key concern to organization because of its influence on the well-being of the organisation. Jenatabadi (2015) sees organisational performance as the degree to which a firm as a distinct social system with given resources, is capable to achieve its goals without being forced to incapacitate their means and resources or bordering it staff with excessive strain. The notion of performance is incredibly vital in this era because it enable the management of companies to ascertain if the establishment is deteriorating, improving or stagnant (Ajagbe, Peter, Udo, Uduimoh & Akpan 2016). According to Armstrong and Barron (2002), they asserted that the performance of firm is strategic and encircling method to deliver consistent prosperity to business by enhancing the various performance of the employees and by building the individual and team capacity to contribute maximally to the success of the firm. organizational performance varies and the present of consistent high performance leads to the sustainability and continuity of the firm. Elena-iuliana and Maria (2016) identify productivity, earning capacity, efficiency, profitability, effectiveness, economy and competitiveness as the measures of organisational performance.

Over the years, various scholars have examined copious ways to ensure consistent and sustainable performance of most firm. However, the link amongst environmental turbulence with performance of organization has received little attention within Nigeria work environment. Environment turbulence according to Sihotang, Kartini, Rufaidah and Sutisna (2016) is the type of environment where one cannot easily predict the results of his/her actions. The work environment is characterized by many imponderable factors that are unpredictable and its manifestation may have a far reaching effect on the performance and wellbeing of the firm. Eisenhardt and

Martin (2000) sees environmental turbulence as a state that is subject to considerable, uncertain, and unpredictable dynamism. Sihotang et al. (2016) further ascertained that an environment that is characterized by high turbulence is difficult to comprehend or understand. They thus asserted that organization needs to be flexible so as to respond adequately and promptly to remain competitive. More often, most scholars have often taken the environmental turbulence to mean the same thing as the rapid change. However, there is slight distinction between the two concept. The turbulence of the environment is unpredictable and highly uncertain while the rapid change is predictable. In alignment with the assertion above, Rosca and Moldoveanu (2009) opined that turbulence is a fast, major and discontinuous changes that firms go through. It is however not a gradual change but are usually radical, frequent and non-linear occurrences. The dimensions of environmental turbulence are market turbulence, technological turbulence, competition turbulence, and regulation turbulence as given by Nashirudin (2014). The food and beverages sector over the years has experienced high mortality rate of most firms and this has negatively affected the economic growth and has further intensify unemployment in the country. The vitality rate of any county is highly dependent on the success of the various sector of its economy. As such, the liquidation of firms in the various sector will ultimately affect the total wellbeing of the country. The problem of poor performance of food and beverages firm has further manifested in the form of low competitiveness, liquidation, unhealthy financial position and low expansion rate. The issue of low performance still persists despite various scholarly work that has been done to resolve the problem. It is against this drawback that this study thus examined how environmental turbulence in terms of market turbulence, technology turbulence,

competition turbulence and regulation turbulence relates with organizational performance.

Research Objectives

The research objectives are to look at the relationship between;

1. Market turbulence and organizational performance.
2. Technological turbulence and organizational performance.
3. Competition turbulence and organizational performance.
4. Regulation turbulence and organizational performance.

Research Questions

The following research questions served as a guide to this study

1. What is the relationship between market turbulence and organizational performance?
2. What is the relationship between technological turbulence and organizational performance?
3. What is the relationship between competition turbulence and organizational performance?
4. What is the relationship between regulation turbulence and organizational performance?

Research Hypotheses

The following research hypotheses served as a tentative answer to the above research questions;

- HO1:** There is no significant relationship between market turbulence and organizational performance.
- HO2:** There is no significant relationship between technological turbulence and organizational performance.
- HO3:** There is no significant relationship between competition turbulence and organizational performance.
- HO4:** There is no significant relationship between regulation turbulence and organizational performance.

2.0 Review of related literature

The contingency management school of thoughts is made up of those theories that claim that there is no one best way to manage, to pilot a firm, or to make decisions. They rather believe that the optimum course of action is dependent or contingent upon the external and internal situation. A contingency management theory is founded on the belief that managerial effectiveness is dependent upon the interaction between the application of managers behaviour and specific situations. In other words, the style of management should vary depending on the situations as there is no best way to apply at all times. This theory is considered as the situation theory. This theory is relevant in this study because the way in which managers are able to manage the organization and achieve success is highly dependent on the environment which is turbulent in nature. Ability of this organization to effectively manage any firm as the situation demands will help enhance the performance of the organization.

Environmental turbulence

Turbulence, according to Johnson and Scholes (1989) consists of two parameters: complexity and dynamics. Hedlof and Janson (1999) in Andrews' view (1992) suggest that the organizational business environment is "a pattern of all external influences and conditions that affect the development and life of a business". Eisenhardt and Martin (2000) defined turbulence as "a situation that is subject to continuous, substantial, unpredictable and uncertain changes. Usually, turbulence is non-linear, more radical, and occurs frequently. A turbulent environment is known by being "difficult to understand" and needs a flexible organization to adequately and promptly respond, to stay competitive. A turbulent environment strives in a situation that is subject to substantial, continuous, unpredictable and

uncertain changes. Public organizations face environments that can change in ways that cannot be predicted. Technological, economic and social circumstances may all rapidly shift and thus place new limits on the operations and achievements of organizations. Other sources of turbulence shoot up from global threats such as climate change and terrorism and local crises such as a significant decline in intergovernmental revenues. Drastically great amount of changes, indicates that firms are operational in a tempestuous environment” (Power & Reid’s, 2005). Kohli and Jaworski (1990) observed that market shifts, preference of customers, changing composition and technology are causes of turbulence. They recommended that companies adjust their strategy based on the unpredictability and frequency of change in technology and/or market preferences. According to Slater and Narver (2014), technological turbulence is the “quick pace coupled with the extent of unpredictability or impulsiveness of alteration in technology in a specific industry; Turbulence in relation to competition denotes the strength of rivalry an establishment face in a specific industry (Paladino, 2013); and market turbulence “portray the amount of volatility of alterations in the behaviour, composition, and customers’ preferences” (Kohli & Jaworski, 1990; Slater & Narver, 2014).

Organizational performance

Organizational performance is a vital variable when it comes to management research and it is without doubt the best indicator of organizational survival. Different researches, like that of Friedlander and Pickle (1968) and Thompson (1967) examined performance as a subject that always reoccur in management’s paradigms. Performance is the company’s ability and capability to achieve intended goals through effectiveness and efficient utilization of available resources. Organizations later began to discover innovative means of

evaluating their performance in the 60’s and 70’s. Yuchtman and Seashore (1967) contended that performance denotes the ability of entities to exploit its different environment for accessibility and utilization of its restricted resources. In the 80s and 90s it was realized that organizational objectives identification is more intricate than it was previously considered. Managers were more enlightened that establishment is successful when it meets its target (effectiveness) with little resources (efficiency). Profit in this context represent one among different indicators or signs of performance. Successful organizational performance can be equated to successful value creation for common stockholders. Organizations carries out different operations to achieve their organizational goals. Therefore, all firms possibly try to achieve some pre-determined goals with the aid of resources available. Hence, the two aspects of the concept, i.e., the organizational inputs or resources and the organizational objective, can be contained in defining of organizational performance. In contrast, Lorsch (1970) measured organizational performance based on two factors, i.e., good fit concerning the firm and its environments; and good fit amongst the organization and individual contributors. Lupton (2013) addressed the performance of establishment in a very explicit and careful way in making comparison with other researchers in the same period. Lupton posit that, in an effective organization, the rate of productivity, degree of satisfaction and members’ motivation are high, while costs, labour unrest and rates of turnover are absent or low. The performance of organizations has been a major interest to management teams because the organization faces dynamic turbulent business environment which poses threat to the success of any given organization. Therefore, performance is achieving organizational objectives. Bourguignon (1997) defines organizational performance

into three terms; Performance is success, Performance is the result of action and Performance is action. Furthermore, Richard, Devinney and Yip (2009) posits that performance of establishment covers three precise areas of firm outcomes; performance in relation to finance, , product performance and shareholders return.

Relationship between Environmental Turbulence and Organizational Performance

Series of inquiry by scholars have researched the bearing of turbulence on performance, most payed attention to organizations in private sector. Most of these researches support the assertions that turbulence negatively affect performance (e.g. Li & Atuahene-Gima, 2001; Lin & Germain, 2003; Kuivalainen, Sundqvist, Anderson & Tushman, 2001; Puumalainen, & Cadogan, 2004; Power & Reid, 2005). Heinrich, Lynn and Hill's (2015) opined that environment of business model involves legal, social, political and economic dimensions of organizational context. These are claimed to directly affect performance, and indirectly affect performance via their impact on firm's process, managerial and structural behaviour. The best structure for an organization is that which is dependent on the external environment where they exist. A strong relationship exists between structure, organizational and environmental performance. (Williams et al., 2016). Lin and Germain (2003) survey the influence of "technological turbulence" and how it impacts performance of 205 companies in China. The question of turbulence in the study emphasis on the rapidity or speed instead of the volatility of external change. Thus, they noticed a negative outcome of turbulence on performance.

It is observed that organizations perform far better in circumstances when firm's priorities align with market environment

(Lawrence & Lorsch, 2002; McAdam et al., 2016; Otley, 2016). Technological innovation capabilities (TIC) has been considered as a significant strategic resource allowing firms to attain sustainable competitive advantage (Henderson 2014; Kong, 2012; & Cheng 2012). They remarked that Firms with more TIC can perform better in more turbulent environments as compared with firms with lesser levels of TIC. TIC can help a firm to create more value than its competitors and can receive a greater economic return above the industry average (Verdu, & Tamayo 2012). Drawing upon contingency theory and the resource-based view perspectives, environmental turbulence may moderate the relationship between TIC and business performance. In an exceedingly blustery market, firms with greater TIC can achieve better performance. When market turbulence is increasing, firms likely require restructuring of their TIC to satisfy evolving needs of customer Tsai and Yang (2014). However, those operating in low market turbulence are less likely to require such adjustments.

3.0 Methodology

The cross sectional survey design which is a type of quasi experimental design was employed in this work because the variables were not within the control of the researcher. Again, this design was used owing that the survey intends to generate new fact without intentional manipulation of the variables. A total population of 142 managers and supervisors from 12 selected food and beverages firms served as the population. A census study was carried out because the population was relatively small and could effectively be managed by the researcher. Questionnaire was utilized for collecting data from respondent. The content validity was used and Crombach Alpha was used to determine the reliability of the instrument. The Crombach Alpha value of competition turbulence, market

turbulence, technological turbulence, regulation turbulence and organization performance were 0.894, 0.721, 0.821, 0.710 and 0.846 respectively. The Spearman rank order correlation coefficient was used in analyzing the stated hypotheses with the help of Statistical Packages for Social Science (SPSS) version 21.

4.0 Result

A total of 142 questionnaires were distributed to respondent, however, only 127 (89%) copies were returned. The

hypotheses test was undertaken at a 95% confidence interval implying a 0.05 level of significance

Decision Rule:

Where $P < 0.05$ = Reject the null hypotheses
Where $P > 0.05$ = Accept the null hypotheses

HO1: There is no significant relationship between market turbulence and organizational performance of food and beverages firms in Rivers state, Nigeria.

Table 1 Market Turbulence and Organizational Performance Correlations

| | | | Market Turbulence | Organizational Performance |
|----------------|----------------------------|-------------------------|-------------------|----------------------------|
| Spearman's rho | Market Turbulence | Correlation Coefficient | 1.000 | -.469 |
| | | Sig. (2-tailed) | . | .000 |
| | | N | 127 | 127 |
| | Organizational Performance | Correlation Coefficient | -.469 | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 127 | 127 |

Hypothesis one: the result of the analysis reveals a substantial relationship between market turbulence and organizational performance ($\rho = -.469$ and $p = 0.000$). this shows that market turbulence has a negative correlation with performance.

HO2: There is no significant relationship between technological turbulence and organizational performance of food and beverages firms in Rivers state, Nigeria.

Table 2 Technological Turbulence and Organizational Performance Correlations

| | | | Technological Turbulence | Organizational Performance |
|----------------|----------------------------|-------------------------|--------------------------|----------------------------|
| Spearman's rho | Technological Turbulence | Correlation Coefficient | 1.000 | -.241 |
| | | Sig. (2-tailed) | . | .000 |
| | | N | 127 | 127 |
| | Organizational Performance | Correlation Coefficient | -.241 | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 127 | 127 |

Hypothesis two: The result of this bivariate hypothesis revealed that technological turbulence has a negative relationship with organizational performance ($\rho = -.241$ and $p = 0.000$). the negative correlation between the variables implies that an increase in technological turbulence will eventually result in low performance of organization.

HO3: There is no significant relationship between competition turbulence and organizational performance of food and beverages firms in Rivers state, Nigeria.

Table 3 Competition Turbulence and Organizational Performance Correlations

| | | | Competition Turbulence | Organizational Performance |
|----------------|----------------------------|-------------------------|------------------------|----------------------------|
| Spearman's rho | Competition Turbulence | Correlation Coefficient | 1.000 | -.532 |
| | | Sig. (2-tailed) | . | .001 |
| | | N | 127 | 127 |
| | Organizational Performance | Correlation Coefficient | -.532 | 1.000 |
| | | Sig. (2-tailed) | .001 | . |
| | | N | 127 | 127 |

Hypothesis three: The result of this bivariate hypothesis in table 3 revealed that competition turbulence has a negative relationship with performance ($\rho = -.532$ and $p = 0.001$). the negative correlation between competition turbulence and organizational performance shows that any change in competition turbulence will have an inverse effect on firm performance.

When competition turbulence increases, performance and vice versa. Thus the null hypothesis was rejected and the alternate hypothesis is hereby accepted.

HO4: There is no significant relationship between regulation turbulence and organizational performance of food and beverages firms in Rivers state, Nigeria.

Table 4 Regulation Turbulence and Organizational Performance Correlations

| | | | Regulation Turbulence | Organizational Performance |
|----------------|----------------------------|-------------------------|-----------------------|----------------------------|
| Spearman's rho | Regulation Turbulence | Correlation Coefficient | 1.000 | -.173 |
| | | Sig. (2-tailed) | . | .000 |
| | | N | 127 | 127 |
| | Organizational Performance | Correlation Coefficient | -.173 | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 127 | 127 |

Hypothesis four: the result of the analysis shows that a noteworthy relationship exists between regulation turbulence and organizational performance ($\rho = -.173$ and $p = 0.000$). this shows that regulation turbulence has a negative correlation with performance. This implies that the presence of regulation turbulence will negatively affect the performance of the firm. Thus the null hypothesis was rejected and the alternate hypothesis was accepted.

5.0 Discussion of Findings

Drawing from the research outcome, it was revealed that environmental turbulence has a noteworthy correlation with the performance of a firm. This denotes that a alteration in the intensity of environmental turbulence, will have a far reaching influence on firms performance. Performance is thus dependent on the turbulence of the environment. The result show that market turbulence has a worthwhile relationship with organizational performance. However, it was observed that market turbulence relates negatively with organizational performances. This depict that when market turbulence increases, the food and beverages performance reduces and vice versa. Furthermore, the result revealed that technological turbulence relates negatively with organizational performance. This suggest that the high rate of technological turbulence will negatively affect the firms' performance. This by implication denotes that technological turbulence could decrease the performance ability of the organization. When technological turbulence increases, performance of the firm also decreases. The moderate relationship implies that technological turbulence has a moderate negative influence on firms' performance. The competition turbulence has a negative relationship on firm's performance. Inability of a firm to develop high agility to tackle the rivalry in the business world will eventually lead to deteriorated firm's

performance. Also, the result of the relationship between regulation turbulence and organization performance shown that the variables have a significant correlation with each other. It was noted that a negative relationship exists between regulation turbulence and firm performance. Business are continuously being regulated by relevant authorities in order to ensure that ethical standards are been maintained among other reasons. Organizations set goals and formulate strategies in order to actualise the stated goals. However, regulation turbulence could affect the various plans and formulated strategies and thus impact negatively on the firm's performance. The higher the regulation turbulence, the lower the performance of the firms. Thus one can easily argue that regulation turbulence is really unhealthy to the performance of firms. This finding is in consonant with the outcome of several scholarly work which observed that turbulence negatively affect performance (Li & Atuahene-Gima, 2001; Lin & Germain, 2003; Kuivalainen, Sundqvist, Anderson & Tushman, 2001; Puumalainen, & Cadogan, 2004; Power & Reid, 2005). Thus organizations that are able to develop more requisite variety to absorb the unprecedented turbulence in the business world are more likely to achieve higher firm's performance.

6.0 Conclusion and Recommendations

Organizations are consistently operating in a turbulent work environment which is constantly characterised by unpredicted dynamism. Thus business is forced towards becoming flexible in order to stay afloat in the dynamic world. The turbulence rate in the business world which is becoming imponderable on daily basis has over time resulted in dwindling growth in the food and beverages firms. Inability of most of the firms to adapt promptly to the proliferation in the turbulent environment has been one of the major reasons for the failure of many establishments. Furthermore, organizations

as a social system interact with immediate and external environment and the influence of these environment have an unprecedented influence on the success of the firm. Thus, it is paramount to consistently seek ways to resist the turbulence in the business environment in order to achieve and sustain high organizational performance and remain competitive. Based on the foregoing conclusion, the under listed recommendations are proffered;

1. The management of the food and beverages firms should develop high level of dynamic capability in their operations in order to stay agile and thus adapt rapidly to any form of turbulence in the business world.
2. The employees of the food and beverages firms should be well trained on how to make use of recent technological inventions in the work place as this will help update their skills and thus boost the firm's performance.
3. The management of the food and beverages firms should ensure that their structures and strategies are flexible in order to easily adapt to any changes and thus help sustain the performance of the organization.
4. The management of the food and beverages firms should adopt differentiation strategy in order to withstand competition turbulence and thus boost their performance in the industry.

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