

TECHNOLOGICAL INTELLIGENCE AND ORGANIZATIONAL PERFORMANCE OF TELECOMMUNICATION FIRMS IN RIVERS STATE

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ABSTRACT

This study sought to analyze technological intelligence and Organizational Performance in Telecommunication Firms in Rivers State. It was therefore recommended that Telecommunication firms in Rivers State should emphasize on building a positive Strategic Intelligence to meet customer's expectation and offer more benefits to customer. Managers and supporting organizations should not only focus exclusively on either technological intelligence or process innovation, but should give due emphasis on the combined and synergetic approach to get the maximum firm performances benefits from these capabilities.

Keywords: *Technological Intelligence, Market Intelligence, Organisational, Performance*

INTRODUCTION

Organizational performance refers to the "firm's market and financial performance, which is positively related to the firm's economic value" (Slater and Narver, 1994, p58) According to the definition there are three important concepts can be highlighted. Those are Market performance, Financial Performance and Economic value. In this study specially consider about the Market performance of the industry. Not only that according to Hunt and Morgan (2015) organizational performance in competitive terms (i.e., compared to relevant competitors), because a market-oriented culture has been posited as one of a firm's competitive capabilities and sources of advantage. The literature argues that a market-oriented culture provides a unifying focus of organizational efforts in the delivery of value to customers while also providing a comparative impetus with competitors' activities (Kohli and Jaworski 2010). Therefore, a market oriented firm is more likely to achieve high levels of customer satisfaction, to keep existing customers loyal, to attract new customers, and subsequently to attain the desired level of growth, market share, and hence of organizational performance (Homburg, 2010).

According to another scholars like Yamin (2001), Gunasekruan (2008) and Mavondo, (2010), Organizational performance refers to how well an organization achieves its market oriented goals as well as its financial goals (Yamin, 2001, Gunasekruan 192008, Mavondo 2010). When consider about this definition there are two important concepts illustrated. In this study consider about the market oriented goals.

Generally, this intelligence includes information gathering from articles, papers, fundamental and applied researches, methods, norms, and industrial processes (April and Bessa, 2006). Technological intelligence entails monitoring technology advancements and their specific application to the products, procedures and processes that define the core activities in any given industry. Technological intelligence entails careful planning and organising to capture competitive intelligence about the R&D budgets, directions and priorities of competing organisations (Koseoglu et al., 2019). Calof and Wright (2008) and Tahmasebifard (2018) averred that technological intelligence about rivals could influence competitive advantage an organisation enjoys. Indeed, all stakeholders populating an organisation's value chain are potential targets of technological espionage, and these include suppliers, customers, government, and also social media.

Technology intelligence is the part of competitive intelligence that supports the projects and scientific investment decisions and helps decision makers in estimating the relative strengths of other organizations. It suggests that the innate nature of all effective measures has its root in intelligence. Among the major types of intelligence (including, military intelligence, political intelligence, economic intelligence, etc.), technology and scientific intelligence plays such a specific role that often becomes an indispensable part of other types of intelligence.

Concept of Technology Intelligence

Technological intelligence assesses the present and new technologies as well as predicting the future technologies and dealing with basic researches, patents, etc. Technological intelligence is evaluated by the factors like the fundamental and applied research level, the number of articles, and having safe industrial processes (Gabber, 2007). Also Technological intelligence is a new tool for the strategic intelligence through which it presents a mechanism to create stable systems of the knowledge management towards the present technologies. Technological intelligence evaluates the benefits and expenses of the new and present technology and the future discontinuity technology (Viviers et al., 2005). Generally, this intelligence includes information gathering from articles, papers, fundamental and applied researches, methods, norms, and industrial processes (April and Bessa, 2006).

Technology intelligence, understood synonymously as business and competitive intelligence, is a young management discipline - in literature as well as in industry. Technology intelligence (TI) is defined as "the capture and delivery of technological information as part of the process whereby an organisation develops an awareness of technology threats and opportunities" (Kerr et al., 2006, p.75). TI responds to a broad set of decision-making needs (from strategic to operational), as it helps a firm become aware of important developments in technologies (Kerr et al., 2006). Amongst other activities, TI could support innovation processes and, for instance, enable the identification of prospective partners with interesting technological knowledge (Mortara et al., 2010), or could be used to identify technology commercialisation opportunities (Rohrbeck, 2007). The technology intelligence as a conceptual outline and methodological management, has several schools of thought. To Savioz (2004), the definition of technology intelligence is framed mainly in two schools of thought.

Concept of Organizational Performance

Each organization has its own goal, and workers have to utilize different control activities and effective operation to achieve their organizational goal. Performance indices are an instrument to evaluate goal achievement. In the for-profit organizations, performance is to measure revenue, production, and profit making. In the non-profit organizations, they do not evaluate performance by profits. They do not have to make an imminent improvement whether the decision is right or not, whether the resource is used properly, and whether the mission is being achieved. However, Seetoo (2009) the non-profit organizations need performance management to control organizational operation.

Drucker (2014) indicated that the performance of the non-profit organizations must use missions as guideline. Otherwise, they cannot operate properly since missions determinate what performances and results they want to accomplish. Thus, the mission accomplishment is the performance indices of the non-profit organization. Decision makers have to continuously examine whether their missions are meaningful to the society and whether the resources are effectively used, and they need seek timing for an improvement.

Organizations today are trying to adapt to all the changes surrounding them by improving their performance through the competitive advantage they create (Ramezan et al, 2013; Masa'deh et al., 2015). Researchers have always looked at organizational performance as the ultimate dependent variable concerned with almost every area in management. This is because organizational

performance allows researchers to evaluate organizations, their actions, and environments and compare them to those of their rivals (Richard et al, 2006; Obeidat, 2016).

Regarding the definition of organizational performance each person tends to have a different conceptualization of performance in general and organizational performance in particular. From a process point of view, performance refers to the transformation of inputs into outputs to achieve specific outcomes. From an economic point of view, performance is the relation between effective cost, realized output, and achieved outcomes (Abu Jarad et al, 2010; Masa'deh et al., 2016). Performance is a fairly broad concept, and it is meaning changes in accordance with user's perspective and needs (Lebas 1995). Traditionally, firm performance has been viewed and measured in accounting terms (Avci et al. 2011). An additional issue should be raised here; due to confidentiality concerns, it is often challenging to obtain actual accounting data from organizations unless they are publicly quoted companies. As a result, previous research studies looking into performance related issues used self-reported financial and non-financial performance measures. However, Sink and Tuttle (2009) note that performance should not be treated only as a financial concept. Thus, it is suggested that particularly in the service sector, non-financial performance should receive serious consideration. In addition, Law et al. (1995) recommend the use of nonfinancial performance measures based on the fact that tourism establishments are labour intensive and customer-oriented. The marketing literature is replete with evidence of the positive relationship between market performance and financial performance (Anderson, 2007). Similarly, studies demonstrate the influence of market performance variables such as market share on return on sales (Buzzell, 2014). On the other hand, marketing performance measurement continues to be a large and growing concern for marketing scholars and managers' alike (O'Sullivan, 2009).

Contingency theory

Coined by Lawrence and Lorsch (1967, p.209), the contingency theory considers that an organization and its subsystems may be contingent to external and internal characteristics. This means, for example, that one or several organizational variables may depend on other variables. Galbraith (1973) emphasized these concepts using two main assumptions: (1) there is no single best way to organize and (2) any one organizing method is not equally effective. These two assumptions were adopted as a main foundation for the contingency theory. Moreover, Kast and Rosenzweig (1973) argued that "the contingency approach attempts to understand the interrelationships within and among organizational subsystems as well as between the organizational system as an entity and its environments. It emphasizes the multivariate nature of organizations and attempts to interpret and understand how they operate under varying conditions". The idea is that there is no single best way of designing the organization and thus any organization must "fit" into the environment. Several studies adopted this perspective for studying the interdependency of the firm with the external environment (Lawrence and Lorsch, 1967; Donaldson, 1984; Ghoshal and Nohria, 1989). Organization theory applied the concept of contingency in order to find answers regarding what kind of organization is most suited to the different environments (Daft, 1987, p.24).

Contingency was also extensively used to study these factors, be they internal or external, which are connected to improved performance. Several studies included information as an important contingency factor in the competitive advantage of the firm (Smith et al. 1991). Weill and Olson (1989) suggested a framework interested in applying the contingency theory to the marketing information system.

The idea of considering the CI as an organizational subsystem suggests that the function may depend on both the external environment and the internal environment. In other words, the CI function may be contingent to both organizational variables and their competitive environment variables. Therefore, an understanding of these contingencies may be critical to the success of the CI function. The variety of external environment conditions seems to affect organizations in different ways. Lawrence and Lorsch (1967) described extensively how the different environmental characteristics present organizations with different requirements. For instance, the lack of

information was considered one aspect which affects the perception of environmental uncertainty. The importance of congruence, or "fit" between the information characteristics of the organizational environment and the Information-processing activity of the firm was a major conclusion of the contingency theoretic perspective within organizational behavior (Galbraith, 1973; Lawrence and Lorsch 1967).

Empirical Review

(Ameri, 2009) studied the relationship between Technology intelligence and organization agility. The results showed that there was a significant positive relationship between organizational agility and its components in terms of demographic characteristics expect for field studies. Moreover, there were a significant positive relationship between intelligence and its components and organizational agility in administration. The results of his study showed that there was a significant difference between line and staff units regarding to organizational intelligence. Furthermore, there was a significant difference between line and staff units of Sepah Bank in terms of strategic vision, belief in common destiny, the index of unity and consensus, morale, assessing the knowledge and attitude of managers in relation to the employees' performance. It also indicated that there was a significant difference in both line and staff units based on the desire of the personnel changes. (Bagherzadeh and Debar, 2010) investigated the relationship between organizational intelligence and organizational agility. The results of his study showed that there was a significant positive correlation between organizational intelligence and organizational agility. Also, there were significant relationships between some dimensions of intelligence including common fate, desire for change, unity and consensus, morale, knowledge application, and performance pressure with organizational agility but he could not find any significant relationship between organizational agility and strategic vision (Khodadadi, Kashef, Ameri & Kashki, 2013).

(Lefter, Prejmerean, and Vasilache, 2008) studied the organizational intelligence of Romanian companies in which human was the main capital. The results showed that only 13 percent of employees in small firms did not recognize this concept. However, the results of data analysis showed that organizational intelligence was in the average or high level. Then, the components of intelligence were identified based on Albrecht's view (2002, 2003). (Chakir and Ada, 2008) investigated the role of training at the workplaces to develop organizational intelligence in Turkey. The results tended to differ substantially in intelligence before and after the workshop. There was not a significant difference in the efficiency of communication among colleagues.

Chuwiruch's study (Chuwiruch et al, 2010), is titled, "Marketing intelligence and Marketing Performance: A Conceptual Framework." In the era of globalization, companies are facing rapid changes in accordance with the clients' needs and the nature of the markets. In order to improve the competitive advantage and performance, companies need to come up with new strategies to attract more customers. This paper presents innovation and marketing strategy as effective ways to sort out environmental changing aspects. It also refers to the new methods applied on a variety of markets to improve marketing results and increase the performance of marketing strategies. In an interview with the marketing mix, five innovation and marketing strategy dimensions have been presented: internet/marketing and focus (Place/Promotion), relationship/marketing focus (Promotion), orientation/customers whom participated in the process of creation (Product/Price), extended marketing alternative (Product/Price) and the cooperation of marketing concern (Place/Promotion). Innovation and marketing strategy ability to innovate is a dynamic one. The dynamic capabilities hypothesis was used to clarify the connection between marketing innovation strategy and outcome variables, which are: brands, trust and customer loyalty, marketing image, and performance. This paper concludes that the marketing strategy of innovation will help to create a positive commercial movement for companies to increase profits and level of performance, and should be able to confirm this in practice. Finally, the abstract model offers a view on relations between innovation and marketing strategy related to structures.

Several studies have been conducted on market intelligence and sales force performance. Internationally, McGowan and Styger (2012) conducted a correlation of hypothesis and practice in market insight gathering for Australian smaller scale businesses and SMEs. The discoveries demonstrate that, in spite of the fact that the act of market insight was not formally attempted by SMEs, there was a culture of gathering inside the organizations in a reactive manner to a change the business or marketplace. This study was conducted in Australia which limits its application in the case of bancassurance in Kenya.

Locally, Kirigo (2011) conducted a research of MI practices on product growth in the banking sector using case of standard Chartered Bank Kenya Limited. The findings indicate that the bank used marketing intelligence in its products development/modification by building brands through the creation of identities, interactions, and experiences. This study failed to evaluate its application in bancassurance and its effects on organization performance. Kiragu (2014) in his study evaluated the barriers that insurance agencies confront in building CA in Kenya. He delineated that changes in strategy had the most negative effect in the Insurance business. Omondi (2013) on the other hand did a study on the determinants of grasping Bancassurance by Commercial Banks in Kenya. The study concentrated on the inflow of new income and business uniqueness as recognized by Bancassurance.

CONCLUSION

This study looked at Technology Intelligence and Organizational Performance of Telecommunication firms in Rivers State. All the relationships were strongly, moderately significant positive related. It is evident that from the study that Technology Intelligence when emphasized in the trading relationships, will lead to repeated purchases hence consumer loyalty.

RECOMMENDATIONS

1. Managers and supporting organizations should not only focus exclusively on either technological intelligence or process innovation, but should give due emphasis on the combined and synergetic approach to get the maximum firm performances benefits from these capabilities..
2. Telecommunication firms need to be more innovative in the use of refined telecommunication know-how in new product development.
3. Finally the study recommends that firms ensure customer satisfaction as it is a good predictor of future purchase behaviour, an indication of behavioural loyalty of the customer.

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