

Chapter 12

Strategic Approach to Business Intelligence and Its Impacts on Organizational Performance

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ABSTRACT

Organizational structures have changed as a result of the widespread use of information technology, as well as the development of software programs and its daily use in all departments. When such technologies became more widespread throughout every sector, enterprises began to understand its effectiveness and have established information technology department requirements in their organizations. With time, these requirements have become integrated into whole organizations, thereby increasing the importance of business intelligence. Competitors, increasing uncertainties, and risks of the sector have resulted in the further development of the concept of business intelligence to support organizations and senior management wishing to achieve a competitive advantage and make strategic decisions. In other words, analyzing data and sharing it among the departments within the organization became significantly important as senior management use this information to make strategic decisions.

INTRODUCTION

In order to be successful in an intensely competitive environment, organizations should be able to establish coordination between departments effectively and efficiently. Therefore, functional units, such as production, human resources, and management, require an accurate data flow for decision-making (Gangadharan & Swami, 2004). In order to handle the challenges of intense competition, information management should be ensured at all times. In addition to obtaining timely information, it is also necessary to implement decisions with an effective and efficient management approach. Business intelligence systems need to be established in order to analyze the large number of organizational data and to provide accurate information for the success of the decision-making process (Yeoh & Popovic, 2016). Especially, since 2000, several significant developments have arisen in the field of information technologies, making

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it increasingly important in business operations. In the early days, organizations were getting information technology support from consultancy services due to the limited number of qualified specialist staff and the use of information technologies in relatively narrow areas. However, in today's environment, organizations have to use information technologies to monitor their activities and offer differentiated services or products. Strategic moves are very important in a competitive environment and therefore business intelligence plays an important role in the development of beneficial strategic steps. The competition, in a dynamic and volatile environment, can affect the performance of organisational decisions in a positive or negative direction. Each organization implements strategies to challenge their competitors, but also to have clear and significant paths in the competitive environment (Foster et al., 2015).

The concept of business intelligence first emerged in the 1980s in France, and the purpose of the idea was to increase the literacy of companies regarding information technology in order to monitor competitors, enrich strategic thinking processes, and provide faster and easier decision-making mechanisms. At first, business intelligence was used to access to the resources. However, its use has increased with new strategies as business intelligence helps organizations to analyse data more efficiently and transfer it to departments within the organization. At the same time that incredible changes were happening within the competitive environment, large companies were leaving, new firms emerged in the market, and new strategies were developed increasing the importance of global competition and technology for business intelligence (Nasri, 2012). Increasing uncertainty in the strategic decision-making process also resulted in increased information processing and analysis activities of organizations (Dishman & Calof, 2008). If these activities are not intensively carried out, the survival of organizations in a competitive environment will be at great risk (Shollo & Galliers, 2016). In the field of management, the terms of business intelligence and information technology can additionally be used to highlight the importance of monitoring environmental factors (Tej Adidam et al., 2012; Gudfinnsson et al., 2015). Clearly, business intelligence is important for analyzing competition strategies, determining their strengths and weaknesses, and examining technological dynamics (Nenzhelele & Pellissier, 2013).

A competitive advantage can be achieved by analyzing a wide range of data and responding promptly to customers or other parties (Muñoz Castellanos & Salinero Martín, 2011). Business intelligence can always help organizations to remain competitive by providing an overview of critical information for strategic management, and in fact, Howson (2008) explains that if organisations adopt business intelligence, they can gain a competitive advantage. In their study in 2004, Phillips-Wren and his colleagues revealed the strategic benefits of business intelligence systems for the organizations. Furthermore, in general terms, if business intelligence is used by organizations in a highly competitive environment, it is likely that a competitive advantage will be achieved in their sector (Kiron & Shockley, 2011).

With an appropriate business intelligence approach, organizations can make effective decisions and gain a competitive advantage in their sector (Li et al., 2008). At the same time, organizations can gain a competitive advantage by using data storage technology for their business intelligence initiatives (Ramamurthy et al., 2008). In a 2014 study, Maune suggests that there is a positive relationship between business intelligence and competitiveness. Generally, business intelligence studies tend to focus on established organizations rather than on new organizations. In particular, the concept of business intelligence may have the capacity to increase the competitiveness of organizations. Business intelligence studies often tend to focus on technical aspects, but it is also important to consider its other positive impacts on organization. Business intelligence helps organisations develop and maintain strategic competencies and creates value for organizations in terms of strategic management. Having a common vision makes it possible to realize the strategic goals of organizations, and organizational cooperation supports participation in

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