

# Chapter 10

## Developing an Effective Strategy for Organizational Business Intelligence

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### ABSTRACT

*Business Intelligence has been adopted across numerous industry sectors where the commensurate benefits have been reported as being significant to those that fall short of expectations. Indeed, an effective strategy that aligns company objectives and Business Intelligence has been shown to be an important factor in firm realizing organizational benefits. Using a case study approach, the paper documents the salient aspects of an energy company's Business Intelligence strategy that directly enhanced informational requirements. The firm's strategy embodied the adherence to certain guiding principles ensuring that the introduction of Business Intelligence directly addressed the company's needs. The paper presents a novel description of a company's Business Intelligence strategy that will provide valuable lessons for not only researchers, but also industry practitioners.*

### INTRODUCTION

Companies today have come to realize the importance of providing accurate, relevant and timely information—information that allows their organisational personnel to engage in effective decision-making practices (Isik et al, 2013). Traditionally the information required as input for decision making resided in a plethora of transaction processing systems. As the number and diversity of these systems increased so did the issues associated with the extraction and integration of the associated data required to support decisions. To overcome these integration issues many companies implemented an Enterprise Resource Planning (ERP). These systems enabled companies to gain efficiencies in their business processes and associated transactions through the high degree of integration of their company-wide business processes,

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and the standardisation of the associated data (Davenport et al, 2003). ERP systems are an essential element of the corporate information systems infrastructure allowing businesses to be competitive in today's world, as well as providing foundation for future growth (Chou et al, 2005).

Although companies have implemented an ERP system there are still issues associated with the analysis of data. One reason is that the implemented ERP system replaces many of the legacy systems however a number of legacy systems are still used. This either due to the lack of equivalent functionality in the ERP systems, budgetary constraints or a future replacement. No matter what the reasons for their existence these legacy systems contain data which contribute to decision making. Often this data needs to be integrated and with the ERP systems data to provide a complete and relevant data for analysis. Another issue is type of reporting available in the ERP system. The Online Transaction Processing (OLTP) environment which underpins the ERP systems limits the types of reports that can be generated and thus the level analysis and insight that can be achieved.

The increased informational requirements of companies and the availability of appropriate computing technology resulted in the evolution of existing IT systems and the emergence of new solutions. These included Knowledge Management (KM), Data Mining (DM), Collaborative Systems (CS), Corporate Performance Management (CPM), Knowledge Discovery (KD) and Analytics, with the term Business Intelligence (BI) tending to be used to encompass all (Gibson et al, 2004; Olszak & Ziemba, 2007).

Business Intelligence (BI) for many companies was implemented as an extension of their ERP Systems in order to gain greater insight into their business processes and associated transactions as well as integrating other data sources. According to Howson (2007, p.2) Business Intelligence is a process that "...allows people at all levels of an organization to access, interact with, and analyse data to manage the business, improve performance, discover opportunities, and operate efficiently". The analysis of corporate data allows a firm to improve productivity and achieve competitive advantage over other firms that may not have the same capabilities (Luftman & Ben-Tvi, 2010; Watson & Wixom, 2007). Indeed, the effective use of Business Intelligence is considered an essential factor in the competitiveness of a company especially in changing markets (Luftman & Ben-Tvi, 2010; Watson & Wixom, 2007).

One industry experiencing considerable change is the electrical power utilities industry sector. This sector has been impacted by increased competition, changing regulatory frameworks, renewable energy and the introduction of new technologies. This dynamic environment has increased the needs for firm's to have cohesive decision-making processes to respond to these competitive pressures (Nasir et al, 2013). There has been limited research on the adoption and use of Business Intelligence in this industry sector, particularly in regards to having a strategy to support organisational decision making. Hence, the research contribution of this paper centres on the documenting of the Business Intelligence use and strategy development by a large Australian energy company. The strategic approach reported could be usefully adopted by of companies in the energy sector or even other industry groups.

## **LITERATURE REVIEW**

Davenport et al (2003) focused on 163 executives working in large enterprises around the world to identify how companies were using Enterprise Resource Planning (ERP) systems to improve business performance and the specific practices that resulted in sustained value creation. They identified that the implementation of an ERP system resulted in sustained value creation however, some corporations realized far more comparable benefits than others. These benefits were directly related to the actions of

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