

# Chapter 16

## Business Intelligence Strategy: A Utilities Company Case Study

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### ABSTRACT

*Although Business Intelligence is seen as priority by many companies, the level of benefits achieved varies significantly between firms. Researchers have indicated that not having an effective Business Intelligence strategy is a significant issue in regards to trying to realize organizational benefits. This paper adopting a case study method investigates an Australian energy company's Business Intelligence adoption and the development of a Business Intelligence strategy that directly informed the firm's information needs. The important elements of this strategy included using a set of guiding principles to ensure that there was a close alignment of Business Intelligence outcomes with the company's needs. The paper provides insights for researchers and practitioners on the important factors need to be considered to achieve effective Business Intelligence.*

### 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). Indeed, early work by Evans and Wurster (1997, pp.72) in their paper on Information Economics stated that "... information is the glue that holds business together". Companies have developed and implemented information systems to facilitate

the collection, processing and dissemination of information. One such system, Enterprise Resource Planning (ERP) system, has enabled companies to gain efficiencies in their business processes and associated transactions through the high degree of integration of their company-wide business processes, 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).

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Many companies have implemented Business Intelligence solutions as an extension of their ERP Systems in order to gain greater insight into their business processes and associated transactions. Notably, business-related information that is subsequently analysed is stored in the firm's ERP system and other inter-linked legacy systems. Business Intelligence can be used to extract this information and transform it into a format to facilitate analysis. Golfarelli et al (2004, p.1) defined Business Intelligence "...as information systems which processes data into information and then into knowledge to facilitate decision making". Indeed, the effective use of Business Intelligence is considered an essential factor in the competitiveness of a company especially in changing markets (Luftman and Ben-Tvi, 2010; Watson and Wixom, 2007).

One industry experiencing considerable change is the electrical 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 management in regards to the on-going development and evolution of their ERP system. Furthermore, Davenport et al (2003) identified three major evolutionary stages in regards to grouping the types of benefits that could be realized through the adoption of ERP systems. These stages related to the firm's processes being integrated and optimized, which in turn facilitated the information flows across the various functional areas of the business. The premise underling of each stage was for firms to:

- **Integrate:** This stage reflects the unification and standardisation of data and processes. ERP systems can be used to better integrate business processes and the associated organizational units;
- **Optimize:** Reflects a stage that aligns the business processes to the overall corporate strategy through the utilisation of embedded "best practice" processes which are enacted when an ERP system is adopted;
- **Informate:** Reflects a stage where the information generated by the ERP system is used to transform work practices. This involves transforming the ERP systems data into context rich information to support effective decision making.

These stages tend to be evolutionary and are reflective of a company's ERP systems maturity level. The concept of maturity is often used to describe the advancement of both people and organisations. Implicit in this notion is that with increasing maturity there are improvements in quantitative or qualitative firm capabilities. Accordingly the more mature a company is in regard

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