ABSTRACT

Business Intelligence (BI) is one of the fastest growing software sector and software vendors are rapidly developing multiple BI tools to support the growing data analysis needs of organisations. In order to be sustainable in a briskly changing turbulent environment, organisations need to have access to information about their operational performance. BI tools play a vital role in supporting the decision makers at different organisational levels. As these tools are becoming critical in decision making, it has become not only an information technology concern but also a management concern. Without proper governance it would be impractical to achieve the value that BI tools offer. Adopting a BI governance framework in organisations will lead to common principles and clear ownership over information. Additionally, appropriate alignment between corporate governance and BI governance can yield more benefits. This paper provides an insight into the importance and value of BI tools. Key functionalities of BI tools have also been highlighted. Different challenges in gaining true value from BI tools have been examined. Four phases of developing a BI governance framework have been illustrated. The alignment between BI governance and corporate governance has also been explored with a recommended model. Exploratory analysis of two organisations (Premier Healthcare Alliance & BellSouth Telecommunications) to identify how they have utilised BI tools and adopted BI governance has been briefly carried out. The paper posits that if the steps for developing a BI framework are adopted by organisations and the BI framework is aligned with the corporate framework, BI deployment and usage will be successful with reduced risk levels.

Keywords: BI Governance, BI Tools, Business Intelligence (BI), Corporate Governance, Goal Alignment

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INTRODUCTION

Business Intelligence (BI) as a concept and as a tool has been widely highlighted in the literature especially in the strategic management discipline as well as the information systems discipline. BI is a process of applying tools and techniques to gather and analyse the data collected from multiple (both internal and external) sources, to create knowledge that helps in decision making (Sohollo, 2011). The use of BI tools can also help improve profits by managing organisational corporate performance and gain competitive advantage through consolidation of past victories (O’Brien & Marakas, 2011). Although there are several benefits that BI tools offer, the main reasons for implementing BI include easy-to-use tools for data discovery, availability of industry specific or business context solutions (Schlegel, Sallam, Yuen & Tapadinhas, 2013) and renewed interest of senior managers.

A survey conducted by Gartner (2013) revealed that BI and analytics ranked number one out of top 10 technology priorities by Chief Information Officers around the world. According to another report by Gartner (2012), BI tools and other performance management software sales revenue reached about US$12.2b in 2011 compared to US$10.5b in 2010 demonstrating a 16.4% increase. The Gartner report (ibid) also indicated that this is the fastest growing software sector and sales are expected to grow exponentially in the coming years. Another technology research company International Data Corporation (IDC) predicted that organisations will spend about $1.8 trillion in the same year to acquire BI software (Lachlan, 2012). These predictions are further strengthened by the surveys done by The Corporate IT Forum, Morgan Franklin, TechTarget, SnapLogic and InformationWeek, indicating the importance of analytical tools for improvement in overall performance (Lachlan, 2012) thus prompting the need for BI governance.

BI governance focusses on designing, implementing and making effective use of BI tools to achieve business objectives and increase return on investments (Watson, Fuller & Ariyachandra, 2004). In order to achieve defined objectives, BI governance needs to be aligned with corporate governance. The alignment of corporate strategy and BI is stressed as the vital element in all BI related initiatives. The strategic use of BI is possible through the acquisition, collation, analysis, interpretation and exploitation of information in organisational business domains to support long term goals (Chung, Chen & Nunamaker, 2005; Liebowitz, 2005).

BI tools are high-risk/high return projects and these tools are often expensive to implement (Heinrichs & Lim, 2003). The problem is exacerbated as BI tools are often used on an ad hoc basis and are not well implemented due to poor planning (White, 2006). As a result organisations become data rich and information poor (MacGillivray, 2000). There is a lack of adequate development guidelines or frameworks that can aid in the systematic deployment of BI (Liebowitz, 2006). Hence to aid BI tools’ deployment, it is important that organisations develop their own BI framework, as it helps to map organisational objectives to functional and individual levels.

Whilst the BI market is growing both from a supply and demand perspective and BI is gaining a lot of importance, there appear to be limited studies that provide systematic steps for developing a BI governance framework. There is more depth in studies that focus on linking BI governance with corporate governance. This paper aims to fill the gaps that exist in literature and provide timely information that can help organisations to funnel their BI efforts in the right direction. BI implementation failures can lead to loss of competitive advantage and financial instability. Hence, organisations need to adequately define the production, usage, ownership and presentation of information that can help create valuable BI. To better understand this linkage, this paper has been divided into multiple sections. The remainder of this paper has been structured as follows. Firstly, this paper highlights the importance and business value of BI tools. Challenges in gaining value from BI tools follow. The paper then outlines and
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