Chapter 8
Enhancing BI Systems Application through the Integration of IT Governance and Knowledge Capabilities of the Organization

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ABSTRACT

Over years, research in Management Information Systems (MIS) has resulted in significant implications for organizations in a wide variety of areas by using socio-technical perspective, which has helped to deliver more business focused solutions. This study reports the results of an empirical examination of the effect of IT governance framework based on COBIT and Organizational Knowledge Pillars in enhancing the IT Governance framework (Business / IT Strategic alignment, Business value delivery, risk management, Resource management, performance measurement) to enhance the business intelligence application and usability within the organization. Quantitative method is adopted for answering the research questions. A questionnaire was used for data collection after contacting several companies, in addition confirmatory factor model and structural equation model were developed and tested and the overall results of the empirical investigation supported the general framework. Using confirmatory factor analysis techniques, the effects of the combination between IT governance factors seen by ITGI and organizational knowledge pillars of the firm on BI Systems application in it were tested and confirmed and the models were also verified. Several statistical methods were used for data analysis; moreover different statistical tools as software packages were employed such as SPSS 17 and EQS 6.1. The study proposes that knowledge management (KM) and IT Governance framework are vital organi-

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zational abilities that support business intelligence application; it also observes that combination of IT governance framework with organizational knowledge within the firm can enhance the organization's BI system application and usability, and its goal is to advance the understanding of the relationships among these factors. The study develops and tested two main hypothesizes: (1) IT Governance framework supports business intelligence application. (2) Organizational knowledge, in turn, leads to support business intelligence application.

INTRODUCTION

Since the mid 1990s of the last decade, the economic theories focused on knowledge based economy as the major trend in which it became the vehicle of the world wide economy. Furthermore businesses in the new century are facing high levels of competition from not only from the local companies but also from foreign ones as a result of globalization, in addition to high increasing speed of technological developments in this digital economy. Here is it seems that there is a tremendous need by organizations around the world to take advantage of the information revolution particularly the field of information systems applications to maximize the benefit out of the invested recourses in information technology by them. Conventionally the development of any system is organized in to several stages that begin with the alignment with business goals until reaching the implementation phase passing through the planning and designing stages. Additionally it is crucial to assess whether the final results meet all different requirements needed in order to increase shouted performance. To do so business must implement business intelligence systems which are applications that meet the large heterogeneous requirements in order to help the decision maker to take his decision by offering the right information at the right time in the right place. Recent trends in this area show an interest in knowledge management (KM) as the possible solution provider to the issue rose previously. Many authors as presented in section 6 argued that KM can provide competitive advantages. Also this study will demonstrate that there is a lack of theoretical studies on development of relationships among BI systems and KM capabilities, and. IT governance In addition to a systematic empirical investigation of these relationships.

BACKGROUND

The knowledge-based view (KBV) theory looks at the organization as a combination of several assets and resources and explains how organizations can get added value from these assets and resources (Grant & Chen, 2005). in addition Styhre (2004) claimed that the organization should be viewed as a site of continuous development and integration pool of all resources like physical, financial and human resources, because of that, two of the main intangible assets of the firm (IT capabilities and knowledge capabilities) are not reflected in the financial indicators although the impact of IT in globalization is evident. Furthermore the role of humans was always important, but it is clear that management experiences are nearly poor in developing countries so it's hard to attain a competitive advantage without the existing of mature management and the know-how experiences (Le Chien Thang et. el., 2007). Following this notion and based on Aristotle's dictum to enhance the utilization of the organization's capabilities, Avison & Fitzgerald (2006) incline that is better to build the widest possible information system for the whole organization rather than building it for particular isolation functions depending, so the integration here is a necessity as indicated