

## Chapter 6

# Mastering Business Process Management and Business Intelligence in Global Business

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### ABSTRACT

*This chapter describes the overviews of Business Process Management (BPM) and Business Intelligence (BI); the importance of BPM in global business; and the importance of BI in global business. BPM enables organizations to align business functions with customer needs and helps executives determine how to deploy, monitor, and measure the organizational resources. When properly executed, BPM has the ability to enhance productivity, reduce costs, and minimize risk in global business. BI includes the applications, tools, and best practices that enable the analysis of information to improve organizational performance. Companies use BI to detect the significant events and identify the business trends in order to quickly adapt to their changing business environment. The chapter argues that applying BPM and BI has the potential to enhance organizational performance and reach strategic goals in global business.*

### INTRODUCTION

Business process management (BPM) is a paradigm for enterprise computing that uses information technology (IT) to support the business processes and to improve these processes to effectively achieve business objectives (Decreus, Poels, Kharbili, & Pulvermueller, 2010). BPM is an important concept that enables the efficient adaptation in the business environment conditions (Bitkowska, 2015). BPM is a management practice which encompasses all activities of the identification, definition, analysis, design, execution, measurement, and continuous improvement of business processes (Rohloff, 2011). With the emergence of BPM and of service-oriented architecture, the focus has shifted to the development of electronic services that integrate the business processes and that diversify the functionalities available to customers (Chou & Seng, 2012). The discipline of BPM requires both business and IT organizational perspectives, in order to adopt a common set of practices, and obtain a holistic view of managing the organizational business processes (Antonucci & Goeke, 2011).

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Business intelligence (BI) is the process of gathering the correct information in the correct format at the correct time and delivering the results for decision-making purposes toward gaining the positive impact on business operations, tactics, and strategy in the business enterprises (Zeng, Li, & Duan, 2012). BI has become the top priority for many organizations who have implemented BI solutions to improve their decision-making process (Isik, Jones, & Sidorova, 2011). BI promises to turn data into knowledge and to help managers succeed in decision making (Niu, Lu, Zhang, & Wu, 2013). BI can improve the organizational performance as a result of improvement on business decision making (Chen, Chiang, & Storey, 2012). The strength of this chapter is on the thorough literature consolidation of BPM and BI. The extant literature of BPM and BI provides a contribution to practitioners and researchers by describing the multifaceted applications of BPM and BI to appeal to the different segments of BPM and BI in order to maximize the business impact of BPM and BI in global business.

## **BACKGROUND**

Business process is defined as the specific ordering of work activities across time and place, with a beginning, an end, and identified input and output (Davenport, 1993). Business process is a sequence of executions in a business context based on the purpose of creating products and services (Scheer, 1999). Business process involves people from the different functional units in the same organization and go across organizational boundaries for the reasons of business partnership, thus increasing the complexity of managing the process (Stohr & Zhao, 2001). Shaw et al. (2007) stated that an organization's current performance depends upon its business processes' collective ability to achieve its fundamental objectives. Organizations implement business processes in order to produce the value for customers (Earl, Sampler, & Short, 1995).

BPM has been an intensely discussed topic in the information system (IS) research field as well as in practice since the late 1980s (Houy, Fettke, & Loos, 2010). BPM is a methodology that allows companies a faster organizational adaptation to the continuously changing requirements of customers (Neubauer, 2009). The operations of BPM practices have evolved from the functional division of work (Taylor, 1911) and business process reengineering (BPR) (Davenport & Short, 1990) to the complex practices of the holistic end-to-end business processes involving the integration of business and IT (Smith & Fingar, 2007). BPM includes the components of total quality management (TQM), the value chain, Six Sigma, Lean, and enterprise resource planning (ERP) (Paim, Caulliraux, & Cardoso, 2008). By integrating IT and business practices, BPM broadens the scope of BPR, focusing on achieving performance improvement by eliminating the non-value added process steps (Khalil, 1997).

BI is a very popular topic in the field of data mining and knowledge discovery from databases (Niu et al., 2013). BI remains a topic of interest in the practitioner's research (Ramakrishnan, Jones, & Sidorova, 2012). BI encompasses a broad category of methodologies, applications, and technologies for collecting, storing, manipulating, analyzing, and providing the access to data to help enterprise users make the better and faster business decisions (Chaudhuri, Dayal, & Narasayya, 2011). Khan et al. (2014) stated that BI is one of the most important concepts that have lived to the expectations. BI has evolved to become a foundational cornerstone of enterprise decision support (Côte-Real, Ruivo, & Oliveira, 2014).

BI technology includes several software applications for extraction, transformation, and loading (ETL), data warehousing, database query and reporting, online analytical processing, data analysis, data mining, and visualization (Sahay & Ranjan, 2008). The four major components of BI constitute

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