

Enterprise Resource Planning (ERP) Implementation Approaches and the Performance of Procure-to-Pay Business Processes (Field Study in Companies that Implement Oracle ERP in Jordan)

Ibrahim Kofahi, Department of Business Administration, The World Islamic Sciences and Education University, Jordan
Haroun Alryalat, College of Information Technology, Ajman University of Science and Technology, Ajman, United Arab Emirates

ABSTRACT

In spite of the importance of implementing Enterprise Resource Planning (ERP) system in any organization, there are still many fears of not getting the return on investment from implementing it. In addition, there are many ERP systems implemented in different organizations that claim they did not get enough benefit from these systems. For this reason, this paper is intended to study the impact of ERP implementation approaches (Agile, Big Bang, and Hybrid) on the performance of Procure-to-Pay business processes. This paper adapts the quantitative research approach by using the survey strategy, which is conducted by a questionnaire collected from 91 respondents working in fifteen companies that implement Oracle ERP in Jordan. The researcher uses the SPSS as an analysis technique to test all hypotheses. The findings of the study show that the two ERP Implementation approaches (Big Bang and Hybrid) have a significant impact on the performance of Procure-to-Pay business processes. On the other hand, the study shows that Agile (ERP) implementation approach has no significant impact on the performance of Procure-to-Pay business processes.

KEYWORDS

Agile Approach, Big Bang Approach, Hybrid Approach, Performance of Procure-To-Pay Business Processes

1. INTRODUCTION

The popular of international organizations, particularly technologist “fast or first movers” who invest in a new enterprise resource planning systems (ERP) project (Cua and Reames, 2013). From this point, ERP systems are modular information systems that automate companies’ business processes such as Accounts Payable, Accounts Receivable, Sales, Purchasing, and Inventory (Fetouh et al., 2011).

Also, ERP has two important characteristics. Firstly, it streams the transfer of visual model of business processes to a software implementation of these processes. Secondly, ERP guarantees a level of integration, security, and data integrity, which is difficult to achieve if there are multiple software platforms (Fetouh et al., 2011).

Additionally, ERP systems are considered as tools that support management processes standardization of multinational organizations. ERP systems have a lot of functionalities based on

best practices. These functionalities are provided to clients within ERP systems. “ERP meet the requirements of universality: that everyone should work in his own language and understand each other” (Chtioui, 2009). This standardization grants ERP system a characteristic that meets the general needs for any organization. Based on this standardization, organizations should find the right fit between ERP system and its business processes to guarantee successful ERP implementation. Furthermore, Kholeif et al. (2007) noted that if misfit happens between ERP system and the organization’s existing practice, there will be two options the organization can select from; organizational adaptation or system customization.

Nowadays, ERP has a special distinguishing characteristic. It is developed by big companies like Oracle, SAP, Microsoft and others depending on the latest best practices implemented in huge big organizations like Airbus, Boeing, telecommunication companies and others. These ERP companies release different versions of the software as they implement new features or enhancements to it. They develop these softwares using latest programming languages like Java. Companies that use these systems get the latest technology and the latest best practices. Whereas, companies depending on their own developed programing, suc as those building their systems using Cobol, will always face issues in transferring to new technologies or new best practices.

Marnewick and Labuschagne (2005) stated that in order to implement ERP system effectively, it should not be considered as an IS but as an integrated business system that includes all business function. Besides, they define ERP as a software package that joins both business processes and IT features. If ERP implementation is to be considered successful, it should involve redesigning business processes from an inflexible mass-transaction orientation to an agile, lean, and knowledge-based process (Law & Ngai, 2007; Tsai et al., 2010). Also, Chung et al. (2007); Wier et al. (2007) mentioned that the outcome of appropriately implementing ERP is to enhance firm performance, which can be achieved mainly by redesigning business processes, integrated managerial functions, speeding reporting cycles, and expanding information capabilities. Typically, when implementing ERP system, the implementation should be linked to business process reengineering so as to focus on business process activities through the company (Subramoniam et al., 2009).

Several previous researches have studied the impact of ERP implementation on organizational performance (Nicolaou & Bhattacharya, 2006; Chtioui 2009; Wieder et al. 2006); HassabElnaby et al., 2011). This research highlights the absence of studies linking different ERP implementation approaches with different organizational performance aspects and the lack of researches investigating appropriateness of approach selection of ERP systems with regard to organizational diversity. To address this issue, the researcher investigated the impact of ERP implementation approaches on the Performance of Procure-to-Pay Business Processes since ERP implementation approaches is considered one of the main factors that influence the project success.

This paper is designed as follows. The next section discusses related literature review, section three suggests the research model and all hypotheses, section four is about the research and section five presents the hypotheses analysis and results. The last part of this paper is the conclusion.

2. LITERATURE REVIEW

2.1. Concept of Enterprise Resource Planning (ERP)

The proper implementation of ERP systems renders many benefits to the organizations implementing it. These benefits affect all the levels and aspects of the organizations. Organizations that implement ERP systems would get these benefit, otherwise the ERP will cause problematic issues to them. ERP system emerged in the beginning of the year 1992.

Recently, ERP systems have become very famous software in the marketplace and a necessary investment for many companies that consider ERP system to solve all their IT issues. It provides effective online transactions with the current e-business era. Furthermore, the board acceptance of

15 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/article/enterprise-resource-planning-erp-implementation-approaches-and-the-performance-of-procure-to-pay-business-processes/169830

Related Content

Privacy Protection Overseas as Perceived by USA-Based IT Professionals

Jaymeen R. Shah (2009). *Handbook of Research on Information Management and the Global Landscape* (pp. 44-58).

www.irma-international.org/chapter/privacy-protection-overseas-perceived-usa/20613

Generating Lifelong-Learning Communities and Branding with Massive Open Online Courses

Rosana Montes, Miguel Gea, Roberto Bergazand Belén Rojas (2014). *Information Resources Management Journal* (pp. 27-46).

www.irma-international.org/article/generating-lifelong-learning-communities-and-branding-with-massive-open-online-courses/110148

Findings and Discussions on the Neural Trust and Multi-Agent System

Gehao Luand Joan Lu (2017). *Examining Information Retrieval and Image Processing Paradigms in Multidisciplinary Contexts* (pp. 344-366).

www.irma-international.org/chapter/findings-and-discussions-on-the-neural-trust-and-multi-agent-system/177714

A Network Data Science Approach to People Analytics

Nan Wangand Evangelos Katsamakas (2019). *Information Resources Management Journal* (pp. 28-51).

www.irma-international.org/article/a-network-data-science-approach-to-people-analytics/225016

Learning Systems Engineering

Valentina Plekhanova (2005). *Encyclopedia of Information Science and Technology, First Edition* (pp. 1820-1826).

www.irma-international.org/chapter/learning-systems-engineering/14519