The E-Business Transformation Framework for E-Commerce Architecture-Modeling Projects

E

Antoine Trad
IBITSM, Switzerland

Damir Kalpić
University of Zagreb, Croatia

INTRODUCTION

A crucial factor in transforming a traditional Business Environment (BE) into an innovative and lean e-business/e-commerce architecture platform, is the role of the e-Business Transformation Manager (e-BTM); who should be assisted with an efficient framework that includes a central decision making module. A just-in-time framework can change the e-business/e-commerce architecture transformation project's outcomes. The e-BTM's role is crucial for the finalization of the implementation phase of the very complex e-business/e-commerce transformation project (e-BTP). During this phase the e-BTM's decisions can be made in a just-in-time manner. There is a need to govern (or control) the e-business and e-commerce transformation project. Unfortunately an adaptable decision making module for such e-projects is quasi non existent. A decision making environment can be also used in the e-commerce's production phase which comes after the finalization of the implementation phase of e-BTP. This research phase's focus is on the Architecture module of the Selection management, Architecture-modeling, Control-monitoring, Decision-making and Training management Framework (SmAmCmDmTmF; for simplification reasons, in further text it will be referred to as the *Environment*) supports the e-BTP architecture activities. In this chapter the authors present a set of e-commerce managerial recommendations.

BACKGROUND

E-BTPs are very difficult to implement, because of their complex and holistic nature, where the big part of complexity is met in its technical implementation phase (Watt, 2014; Gudnason & Scherer, 2012). The *Environment* can be applied to all e-business/e-commerce business models (Joseph, 2014). E-Business refers to any business conducted using different types of electronic media; where the most common form is the business that makes its business transactions and revenue via the world wide web that is based on internet technologies (e-business, 2014). The development and evolution of e-Business related fields like e-commerce are a fundamental factor for any economy. E-Business/e-commerce related fields added significant savings in the building of business infrastructures where they are also an enabler for optimized decision making and support quicker response to market requests. Market requests known as e-transactions are essential for all e-business related interactions (Kalpić, 2011).

The technical implementation phase of an e-BTP is the major cause of high failure rates in e-business/e-commerce transformation projects. That is why the e-BTMs' skills should encompass knowledge of:

1) e-business/e-commerce processes' architectures; 2) e-business services' technologies; 3) real-time unbundling of e-business/e-commerce environments (Willaert, 2001); 4) agile project management; 5) just-in-time implementation and integration e-business/e-commerce services; 6) organizational behaviour and engineering; 7) management sciences methodologies; 8) e-enterprise or enterprise 2.0 architectures and their integration in concrete e-BTP's implementation phases (Platt, 2007). The actual hype of enterprise 2.0 in the e-business organizations is a buzz word introduced by the Harvard Business School in 2006; they describe the usage of web 2.0 and web 3.0 technologies in transformed e-enterprises in order to increase productivity and efficiency. Therefore the authors highly recommend a qualified technocrat's profile (Farhoomand, 2004) for the e-BTM; who needs to be assisted with by a Decision module (Dm) (Trad & Kalpić, 2013c).

MAIN FOCUS OF THE ARTICLE

The research and development processes included the literature review of the *Environment's* proof of concept for each of its modules (Bruce, 1994). During these processes, what struck the authors was that after so many years and efforts in the field of e-transformations, the failure rates are still extremely high and are even constantly increasing. That is probably due to the handicap in the e-management of complexity that is encountered during the implementation phase of the e-BTP (Capgemini, 2009). The topic's main research question is: "Which e-business transformation manager's profile characteristics and which type of support are needed for the implementation phase of an e-business transformation project?". The targeted business domain is any e-business related environment that has frequent change requests.

The *Environment's* Architecture and modeling module (Am) supports the e-business transformation manager in the process of modeling in the implementation phase. The authors have proved the existence of a multi-dimensional knowledge gap as well as the need for a real world framework like the *Environment* to support continuous transformation processes (Trad & Kalpić, 2013b; Santa Cruz University, 2011).

Concerning this chapter's presentation, the authors have decided to use various figures in order to make this chapter easy to understand and apprehend.

THE ENVIRONMENT

The *Environment* delivers: 1) a real e-business transformation framework in the form of a reusable pattern and solution; and 2) the corresponding set of e-business and e-commerce managerial recommendations for the transformation manager's selection, modeling strategy, establishment skills, decision making building block and training management. The e-business/e-commerce transformation manager has to handle the complex technical implementation phase of business e-transformation projects; knowing that business transformation projects' implementation phase is the major cause of very high failure rates (CapGemini, 2007; CapGemini, 2009). The implementations of internet-based resources in e-transformation projects require specific enterprise and e-business architecture strategy knowledge. The authors have based their *Environment* on the main fact that only around 12% of business organizations successfully terminate innovation-related e-business transformations projects (Tidd & Bessant, 2009).

It is known that organizations that are successful in managing e-business transformation projects outperform other companies in growth and financial performance (Tidd, 2006). Therefore there is an essential

19 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/chapter/the-e-business-transformation-framework-for-e-commerce-architecture-modeling-projects/148999

Related Content

Prospects and Challenges of Mobile Financial Services (MFS) in Bangladesh
Dhanonjoy Kumar (2022). *Handbook of Research on Social Impacts of E-Payment and Blockchain Technology (pp. 320-341).*
www.irma-international.org/chapter/prospects-and-challenges-of-mobile-financial-services-mfs-in-bangladesh/293871

Do Skills and Challenge Affect Perceived Learning? Mediating Role of Engagement
Anitha Acharyaand Manish Gupta (2020). *Journal of Electronic Commerce in Organizations (pp. 64-79).*
www.irma-international.org/article/do-skills-and-challenge-affect-perceived-learning-mediating-role-of-engagement/247419

A Behavioral Beliefs Model of Trustworthiness in Consumer-Oriented E-Commerce
Craig Van Slyke, France Belangerand Christie L. Comunale (2009). *Journal of Electronic Commerce in Organizations (pp. 22-43).*
www.irma-international.org/article/behavioral-beliefs-model-trustworthiness-consumer/3529

Online or Offline?: The Rise of "Peer-to-Peer" Lending in Microfinance
Susan Johnson, Arvind Ashtaand Djamchid Assadi (2010). *Journal of Electronic Commerce in Organizations (pp. 26-37).*
www.irma-international.org/article/online-offline-rise-peer-peer/44912

Mobile Agents, Mobile Computing and Mobile Users in Global E-Commerce
Roberto Vinaja (2002). *Strategies for eCommerce Success (pp. 278-288).*
www.irma-international.org/chapter/mobile-agents-mobile-computing-mobile/29856