Information Technology Process Improvement Decision-Making: An Exploratory Study from the Perspective of Process Owners and Process Manager

Sandy A. Lamp, Capella University, USA
Kathleen M. Hargiss, Capella University, USA
Caroline Howard, HC Consulting, USA

ABSTRACT

This article is derived from a qualitative multicase study with two settings that explored the way decisions are made in two IT organizations regarding process improvement initiatives by using face-to-face semi-structured interviews with 20 IT process owners and managers. The two participating organizations are a healthcare insurance company and a manufacturer of electronic interconnects. The study sought to uncover (a) how IT process improvements are prioritized and how approvals are attained, (b) how senior leadership is involved in decision making, (c) how security and risk are considered, (d) if and how formal process improvement methodologies are used, (e) if and how estimated and actual cost benefit analysis are conducted associated with decisions, and (f) how alignment with organizational goals is attained. The topic of IT governance was narrowed to explore the perspective of IT process owners and process managers, and their approaches and methodologies used with IT process improvement initiatives. The study found that pre-decision stages take place in IT investment decision making, and that process owners and process managers, participants other than senior leadership, and executive level decision makers are involved in these pre-decision stages and may be involved in the final decision stages.

Keywords: Decision Making, Investment Decision Making, IT Process Improvements, Lean, Process Manager, Process Owner, Six Sigma, Software Development

INTRODUCTION

Over the past few decades, technology has become pervasive in all organizations. Information technology (IT) and information systems (IS) professionals are in high demand, and the demand continues to increase with time (Lee & Mirchandani, 2010). Organizational dependence on technology highlights the need to employ talented IT professionals to protect these systems, and adds pressure on IT leadership to ensure that there are well-defined IT governance processes in place to ensure compliance with regulatory requirements and industry standards, as well as to optimize IT investments (Calder...
Firms seeking to optimize asset utilization try to find the right balance between governance for profitability and governance for innovation (Weill & Ross, 2005). IT governance is the process by which decisions are made pertaining to IT investments, which includes (a) who makes decisions, (b) how decisions are made, (c) how outcomes are measured, and (d) how decision makers are held accountable (Symons, Cameron, Rasmussen, & Orlov, 2006).

The economic turmoil that arose during the last few years has increased the importance of corporate and IT governance. Organizations that are well-governed and prudent in expending limited investor funds have a competitive advantage over competitors (Calder & Moir, 2009). As organizations continue to be faced with rapid changes in technology and business environments, more and more IT managers and project teams are advocating agile methods in their software development processes to add flexibility and speed to market (Xu, 2009). Lean and Six Sigma utilization is also on the rise within organizations, including service industry firms, to further streamline IT processes and projects (George, 2003).

While the organizations discussed in this article represent different industries, each organization is considered to be a top performer in its own industry. The diversity of the organizations posed an opportunity to compare and contrast information during data collection from participants, and during and after data analysis. The research was conducted on site where study participants worked. This provided an opportunity to observe and engage with participants at the operational level resulting in an embedded case design (Yin, 2009).

This article narrows the broad topic of IT governance to focus on IT investment decision making, particularly in regard to process improvement initiatives, and explores the perspective of process owners and process managers, and their organization’s decision-making. Process owners are responsible for ensuring that processes deliver results, and have the authority to make needed process changes (Hammer, 2007). Process Managers are typically closer to the front-line operation and the performers who execute the processes, and are charged with meeting the requirements of relevant stakeholders (Hammer; Zwikael, & Globerson, 2006).

BACKGROUND

Organizational processes should be designed to achieve key goals, such as, cost/risk control, alignment of activities across the organization, and predictability (Tarr, Williams, & Halpern, 2008). Williams (2001) noted that IT governance is emerging as an integral part of enterprise governance with a goal of ensuring (a) there is IT alignment with the enterprise to maximize benefits, (b) resources are used responsibly, and (c) related risks are managed appropriately. In most organizations, no one person or area is in charge of the organization’s key processes because the organization is divided into functional pieces, or departmentalized by products (Vanhaverbeke & Torremans, 1999). IT decisions are expected to have substantial impacts on the enterprise as a whole (Ranganathan & Sethi, 2002). This drives IT decision-making processes to involve a consideration of a wide range of technical and organizational issues (Sabherwal & King, 1992).

Researchers were encouraged to look beyond the final decision makers by focusing on other actors in the pre-decision stage activities and discussed the responsibility and accountability implied for major participants in the decision process (Xue, Liang, & Boulton, 2008). Xue et al. (2008) used a multiple-case design with six state-owned hospitals in China with executive level participants. The Xue et al. (2008) study provided a framework for the investigation discussed in this article as they proposed that there are three broad factors that can affect an organization’s IT governance: the external environment, the internal context, and an organization’s IT investments characteristics. External environment factors impact IT governance patterns based on resource and capability requirements they impose on organizations (Xue...
Related Content

Decision Making by Emergency Room Physicians and Residents: Implications for the Design of Clinical Decision Support Systems
www.igi-global.com/chapter/decision-making-emergency-room-physicians/36770?camid=4v1a

The Planned and Materialized Implementation of an Information System
www.igi-global.com/chapter/planned-materialized-implementation-information-system/6434?camid=4v1a

Capacity for Engineering Systems Thinking (CEST): Literature Review, Principles for Assessing and the Reliability and Validity of an Assessing Tool
www.igi-global.com/chapter/capacity-engineering-systems-thinking-cest/36750?camid=4v1a
Stability and Creativity as Contradicting Values in Information Management
www.igi-global.com/chapter/stability-creativity-contradicting-values-information/36752?camid=4v1a