Business-IT Alignment in Collaborative Networked Organizations

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Abstract: Organization’s concerns as controlling costs, improving quality, increasing effectiveness and managing risk have become increasingly important. Business-IT alignment (B-ITa) is a known solution for such concerns. There is a considerable literature on measuring and improving B-ITa in single organizations but the problem of B-ITa in Collaborative Networked Organizations (CNOs) has hardly been studied. Maturity Models (MM) are newly emerging measurement strategies for businesses/organizations that can help to measure the maturity of the relationship. To assess the maturity of CNOs there exist a number of MMs in this study, researchers consider the most recently developed MM, the IT-Enabled Collaborative Networked Organizations Maturity Model that developed by Santana Tapia.

Key words: Business-IT alignment, ICoNO, collaborative networked organizations, maturity models, quality, Iran

INTRODUCTION

Business-IT alignment definitions: Business change is one of the most outstanding and most pervasive qualities of global economies. There has been some consideration of business change itself but less emphasis has been on studying the outcomes of this change with regard to Information Technology (IT) and its interrelation.

Organizational change requires the information systems architecture of an organization to adjust too. The necessity of adjustment for information systems according to organizational environment adds an important dimension to the general discussion of business-IT alignment. The term B-ITa is already >15 years old (Henderson and Venkatraman, 1993). However, despite years of research, B-ITa still ranks as a major modern-day area of concern for CIO (2008).

MATERIALS AND METHODS

According to a survey by Computer Science Corp (CSC), the top concern for senior IT executives is the alignment of the IT function with their business operations. This alignment means fitting the IT function with the business goals, needs, programs and operating style. It means that the activities of both the IT and business operations are united in one common business purpose (Diamond, 1994). Table 1 shows a summary of several B-ITa definitions.

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<td>Henderson and Venkatraman (1993)</td>
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Collaborative networked organizations: According to Santana Tapia (2006), a CNO is any mix-and-match network of profit-and-loss responsible organizational units or of independent organizations, connected by IT that work together to jointly accomplish tasks, reach common goals and serve customers over goals based on their collaboration. Different network organizations behave differently for achieving their in perspective of Business-IT alignment (B-ITa) gives rise to the question of how to measure the maturity of the relationship. Maturity Models (MMs) are newly emerging measurement strategies for businesses/organizations that can help to measure the maturity of the relationship (Bukhsh, 2010).

RESULTS AND DISCUSSION

The ICoNOS MM: Maturity Models (MMs) are a suitable vehicle for CNOs to gain a deeper understanding of their current B-ITa and to plan what steps to take toward better alignment. To assess the maturity of CNOs, there exist a number of MMs (Lufman, 2003). In this study, researchers identify the most recently developed MM, the IT-Enabled Collaborative Networked Organizations Maturity Model ICoNOS MM (Santana Tapia, 2009b). The ICoNOS MM is a two dimensional framework (Fig. 1). These dimensions represent the maturity levels and the domains to which these levels apply. The ICoNOS MM has five levels of maturity.

**Level 1; incomplete:** At maturity level 1, processes related to a particular B-ITa domain are usually not performed or partially performed. It means such a particular domain is not explicitly considered when a CNO strives for B-ITa. Therefore, this level contains no processes in the ICoNOS MM.

**Level 2; isolated:** At maturity level 2, processes are the basic infrastructure in place to support a particular B-ITa domain. They are planned and executed in accordance with a policy; employ skilled people who have adequate resources to produce controlled outputs are monitored, controlled and reviewed. However, such processes are isolated initiatives that are not managed from the entire CNO perspective.

**Level 3; standardized:** At maturity level 3, processes are directed to make improvements in the standardization and management of a particular B-ITa domain. Processes are performed from a CNO perspective. They are well characterized and understood and are described in standards, procedures, tools and methods.

**Level 4; quantitatively managed:** At maturity level 4, processes use statistical and other quantitative techniques. Quantitative objectives for quality and process performance are established and used as criteria in managing the process. Quality and process performance is understood in statistical terms and is managed throughout the life of the process.

**Level 5; optimized:** At maturity level 5, processes are improved based on an understanding of the common

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Fig. 1: The ICoNOS MM (Santana Tapia, 2009b)
causes of variations inherent in the process. The focus of
an optimized process is on continuously optimizing the
range of process performance through both incremental
and innovative improvements (Santana Tapia et al., 2008).
The ICoNoS MM includes four domains.

**Partnering structure:** Defined as the inter-organizational
work division, organizational structure and roles and
responsibilities definition that indicate where and how the
work gets done and who is involved.

**IS architecture:** It defined as the fundamental
organization of the information management function of
the participants embodied in the software applications
that realize this function their relationships to each other
and to the environment and the principles guiding its
design and evolution.

**Process architecture:** It defined as the choreography of
all (individual and collaborative) processes needed to
reach the shared goals of the participants.

**Coordination:** It defined as the mechanisms to manage
the interaction and work among the participating
organizations taking into account the dependencies
and the shared resources among the processes
(Santana Tapia et al., 2008).

**CONCLUSION**

There is a considerable literature on measuring and
improving business-IT alignment in single organizations but the problem
of B-ITa in Collaborative Networked Organizations (CNOs) has hardly been studied. Assessing B-ITa in
CNOs is a significant challenge. MMs are considered
important instrument to access that in this study,
researchers are considering the most recent one. The
ICoNoS MM, developed by Santana Tapia (2009a). Unlike
maturity models for assessing alignment in single
organizations, the ICoNoS MM is applicable at the CNO
level. This maturity model is a promising attempt to
properly understand the domains involved in
collaborative business-IT alignment in terms of process
maturity.

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