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ASSESSING STRATEGIC ALIGNMENT MATURITY AND ITS EFFECT ON ORGANIZATIONAL PERFORMANCE AND MUTUAL UNDERSTANDING OF OBJECTIVES

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Abstract

This paper outlines our research-in-progress to develop and validate an instrument to measure strategic alignment maturity. Strategic alignment is defined as the deployment of IT in an appropriate and timely way, in conjunction with business strategies, objectives, and needs. Strategic alignment maturity (SAM) assesses the management practices and strategic choices in place to evolve and maintain alignment. The strategic alignment maturity framework developed by Luftman (2000) is used as a basis for this research. This study proposes further validation of the usefulness of strategic alignment maturity by examining its relationship to organizational performance and the mutual understanding of IT and business objectives. Knowing the maturity of its alignment management practices and strategic choices may enable an organization to see where it stands and how it can evolve to a more mature level whereby it can more effectively implement its IT strategies.

Research Problem/Question

The key purpose of this research is to further develop an understanding of the process of strategic alignment by testing a theoretical framework of the maturity of the management decisions and strategic choices in place which influence alignment. The Strategic Alignment Maturity model is developed with two major objectives. First, it should provide a theoretical basis for assessing strategic alignment maturity. Second, it should improve our understanding of the nature of the factors which comprise strategic alignment maturity, providing new insights into its successful management. Another important objective of this study is to examine the relationship between strategic alignment maturity and the mutual understanding of business and IT objectives between business and IT executives. Additionally, this study examines the relationship between strategic alignment maturity and organizational performance. This work should be useful to business and IT executives as they direct their management practices and strategic choices in managing their organizational resources. Building on these research objectives, the key research questions of this study are:

1. “What are the relevant management practices and strategic choices within the factors of strategic alignment maturity?”
2. “What is the nature of the relationship between the factors of strategic alignment maturity and the mutual understanding of IT and business objectives?”
3. “What is the nature of the relationship between the factors of strategic alignment maturity and the performance of the organization?”
4. “Does strategic alignment maturity differ based on industry sector, size, IT budget, and revenues?”

These questions are addressed by developing a conceptual model consisting of strategic alignment maturity, short-term linkage, and organizational performance (see Figure 1).

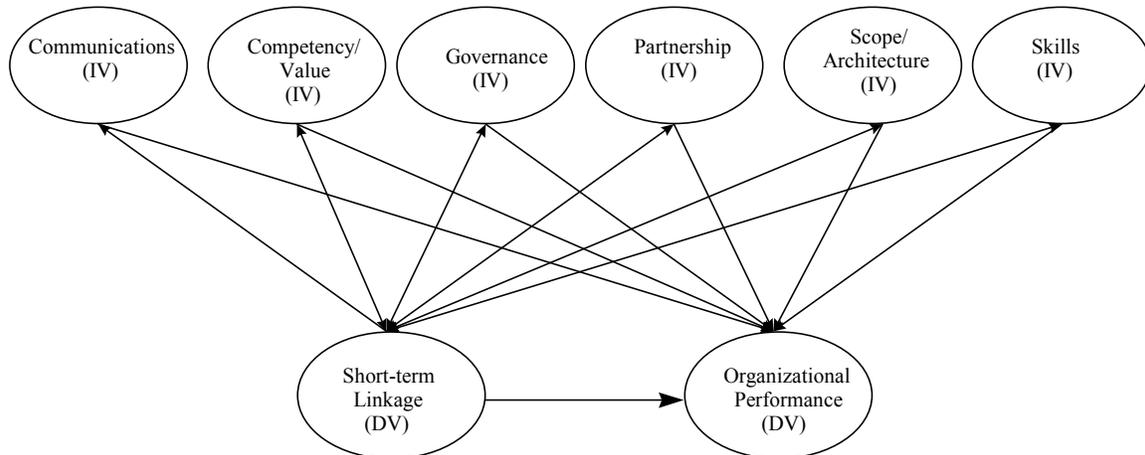


Figure 1. Conceptual Model of Maturity, Linkage, and Performance

Relevant Theories

The conceptual model of maturity, linkage, and performance is based on the SAM framework (Luftman 2000), research on the enablers and inhibitors of alignment (Papp, Luftman, & Brier 1996), Henderson and Venkatraman's (1993) Strategic Alignment Model, stages of growth (Nolan 1979; Galliers & Sutherland 1991), Software Engineering Institute's Capability Maturity Model (Humphrey 1988), short-term linkage (Reich & Benbasat 1996), organizational performance (Brynjolfsson & Hitt 1993; Papp, 1999) and the relationship between alignment and performance (Chan, Huff, Barclay & Copeland 1997; Tallon, Kraemer, Gurbaxani 2000).

The six factors of the SAM framework are comprised of multiple attributes with multiple levels pertaining to possible management choices and strategic decisions within an organization, each of which has the potential to promote strategic alignment between the IT and business functions. The literature suggests that enablers of strategic alignment include management practices and strategic choices which facilitate (1) communication and understanding between business and IT (Papp et al. 1996; Reich & Benbasat 1996), (2) competency and value measurement (Praire 1996; Van Der Zee & De Jong 1999), (3) IT governance (Venkatraman, Henderson, Oldach 1993; Teo & King, 1997), (4) partnership (Henderson, Thomas, & Venkatraman, 1992); (5) IT infrastructure scope (Weill & Broadbent 1998), and (6) human resource skills (Reich & Kaarst-Brown 1998; Roepke, Agarwal, & Feratt 2000).

Our research will also examine the relationship between SAM and short-term linkage. In case study research, Reich and Benbasat (1996) found that practices promoting communications between IT and business executives and mutual IT and business planning were associated with higher levels of short-term linkage. One measure of short-term linkage they suggested as applicable to large sample investigations was self-reporting of the level of understanding that IT executives had about current business objectives and the level of understanding business executives had about current IT objectives.

We will also examine the relationship between SAM and organizational performance. Recent empirical research has shown that there is a relationship between strategic alignment and perceived business performance (Chan et al. 1997) and between business value of IT (Tallon et al. 2000). Tallon et al. (2000) found a relationship between strategic alignment and management practices such as IT-business participation in (a) resolving IT and business issues, (b) strategy development, and (c) championing IT. Papp (1999) used financial measurements to determine the moderating effects of alignment perspective (the distinct interrelationship of business strategy, IT strategy, organizational and IT infrastructure and processes) on performance. He found that earnings per share, return on investment, and pre-tax income all effect firm performance when moderated by the alignment perspective. We propose that more mature systems of strategic alignment practices can provide a quantitative contribution to firm performance, the presumption being that these practices help to implement a firm's competitive strategy, and are thus a source of sustained competitive advantage.

Planned Methodology

A SAM assessment scale, based on Luftman's SAM framework and review of existing literature, has been developed and is being validated. The scale includes multiple items for each of the six factors. Most of the survey questions have five different response choices, each representing an increasing degree of maturity for the respective item it measures. Three items and their response choices from the survey are shown below:

To what extent does IT understand the organization's business environment (e.g. its customers, competitors, processes, partners/alliances):

- a) Senior and mid-level IT managers do not understand the business.
- b) Senior and mid-level IT managers have a limited understanding of the business.
- c) Senior and mid-level IT managers have a good understanding of the business.
- d) Understanding of the business by all IT members is encouraged and promoted by senior managers.
- e) Understanding of the business is required (e.g. tied to performance appraisals) throughout the IT function.
- f) N/A or don't know

The following statements pertain to how IT projects are prioritized. Our IT project prioritization process is usually:

- a) In reaction to a business or IT need.
- b) Determined by the IT function.
- c) Determined by the business function.
- d) Mutually determined between senior and mid-level IT and business management.
- e) Mutually determined between senior and mid-level IT and business management *and* with consideration of the priorities of our business partners/alliances.
- f) N/A or don't know

The following statements pertain to the scope of your IT systems. Our primary systems are:

- a) Traditional (e.g. e-mail, accounting, word processing, "off-the-shelf", legacy).
- b) Transaction-oriented (e.g. back office support, office automation systems).
- c) Business process enablers (IT supports business process change).
- d) Business process drivers (IT is a catalyst for business process change).
- e) Business strategy enabler/drivers (IT is a catalyst to changes in the business strategy).
- f) N/A or don't know.

Short-term linkage will be measured using items taken from Reich and Benbasat (1996) to measure mutual understanding of IT and business objectives between IT and business executives. Organizational performance will be measured using quantitative financial indicators from secondary data sources such as Compustat.

Several case studies will be performed to extend our understanding of management practices used to facilitate alignment.

Semi-structured interviews of both business and IT executives will be conducted. A pre-test of the SAM instrument will be administered to IT and business professionals in an organizational or academic setting. Survey data will be collected from both IT and business executives from organizations which are members of The Conference Board and/or the Society of Information Management. Data analysis will consist of confirmatory factor analysis of the SAM criteria. Descriptive statistics will be used to determine maturity by industry sector, size, IT budget, etc. Discriminant analysis will be used to determine the relationship between maturity and the mutual understanding of IT and business objectives. Regression analysis will be used to determine the relationship between maturity and organizational performance. Structural equation modeling will be used to test the conceptual model of maturity, linkage, and performance used in this study to determine if causality exists between strategic alignment maturity, short-term linkage, and organizational performance.

References

References are available upon request from the first author (dsledgia@stevens-tech.edu).