

Strategic Alignment Model Revisited

Considerations of Business-IT Alignment Formative Factors

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Abstract: The purpose of this study is to propose a framework for business-IT alignment implementation based on Strategic Alignment Model (SAM) suggested by Henderson and Venkatraman. Since IT use is a precondition for business operation, business is no longer distinguishable from IT. While the importance of business-IT alignment has been growing, the alignment concept is still ambiguous. SAM, which was suggested in 1989, has been a seminal model representing business-IT alignment structure. Alignment research has been conducted from various viewpoints based on SAM. This study reinterprets SAM in the light of results of prior alignment research and proposes a more practical model. Each component of business-IT alignment model is specifically explained. Furthermore, “alignment option generator”, which can be used as a guideline for business-IT alignment implementation, is also proposed. Alignment between business and IT can be efficiently and effectively achieved by using the alignment option generator.

1 INTRODUCTION

Effective IT (information technology) use is a critical issue for a company to improve business performance. The importance of achieving alignment between business and IT is widely recognized by many researchers and practitioners. Achieving business-IT alignment more successfully than competitors is one of the keys to gaining competitive advantage.

A lot of alignment research has been conducted in the context of growing importance of alignment for a company. Business-IT alignment is defined as “balancing among the choices made across all four domains: business strategy, IT strategy, organizational infrastructure, and IT infrastructure” (Henderson and Venkatraman, 1993, p.9).

In spite of the vigorous alignment research, the concept of alignment has been vague. Specific alignment contents and an implementation guideline have not been sufficiently suggested in the prior research. A more practical alignment model is required for alignment implementation.

This study reinterprets Strategic Alignment Model (SAM) suggested by Henderson and Venkatraman (1993) in the light of the relevant literature of alignment research. SAM is a seminal

alignment model that has been the foundation of alignment research to date. Each component of business-IT alignment model is expounded. In addition, this study also proposes “alignment option generator” as a guideline for alignment implementation. Business and IT managers can understand the current alignment status and address future alignment implementation issues via the framework.

2 RELATED WORKS

Business-IT alignment research has been conducted from various viewpoints since the late 1980’s. Eight alignment research perspectives are identified: (1) alignment model, (2) alignment content, (3) alignment process, (4) critical success factors for alignment, (5) alignment maturity, (6) alignment measurement, (7) alignment adjustment, and (8) alignment enhancement (Kudo and Yasuda, 2009).

This study focuses on the alignment model research perspective and revises SAM based on the results of these eight alignment research perspectives.

The advantage of SAM is that alignment structure can be understood. Alignment components that should be considered can be also identified. In

contrast, it is not clear how SAM is applied to real alignment practices. It is difficult to understand how each component of SAM should be developed because each component of SAM is not specifically explained. Moreover, while the alignment infrastructure is included in SAM, an alignment execution domain including business and IT operations is not well explained (Maes, 1999). This study proposes a more implementation-oriented alignment model by extending and revising SAM.

3 ALIGNMENT MODEL FOR IMPLEMENTATION

Figure 1 shows the generic business-IT alignment model for implementation.

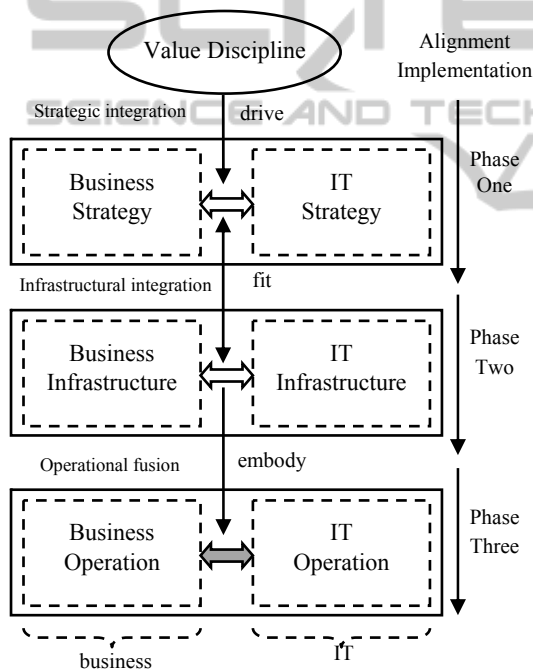


Figure 1: Generic business-IT alignment model for implementation.

The generic business-IT alignment model is developed by drawing upon some frameworks suggested in the prior alignment research (Walton, 1989; Henderson and Venkatraman, 1993; Keen, 1993; McGee, et al., 1993; Maes, 1999; Ross, et al., 2006).

The model is based on some assumptions: One, the boundary between business and IT is increasingly obscure. Decisions pertaining to business and IT choices in strategy, infrastructure,

and operation domains need to be made in parallel. Two, as with the assumption of SAM, a company needs to achieve a fit between external and internal domains. The external domain means the organization's positioning in the competitive arena. The strategic integration in the model corresponds to the external domain. The infrastructural integration and operational fusion are categorized into the internal domain, which means the design of an appropriate administrative structure to support its execution. Three, business-IT alignment is driven by "value discipline". The value discipline framework is suggested by Treacy and Wiersema (1995). The consistency among strategic, infrastructural, and operational domains is achieved driven by company's value discipline. Four, alignment implementation consists of three phases. Value proposition vision is developed via business-IT strategic integration in phase one. Based on the value proposition vision, value creation foundation is developed through business-IT infrastructural integration in phase two. Observed value is proposed to customers in phase three. Business-IT alignment implementation model includes 11 components: (1) value discipline, (2) business scope, (3) distinctive competencies, (4) business governance, (5) IT scope, (6) systemic competencies, (7) IT governance, (8) enterprise architecture, (9) structure, (10) skill, and (11) operation.

4 ACHIEVING BUSINESS-IT ALIGNMENT

As shown in Figure 1, alignment implementation consists of three phases. This study proposes "alignment option generator (AOG)" for alignment implementation. AOG is a guideline for business-IT alignment implementation. A company chooses specific alignment options in AOG, and realizes the logical consistency among components. The alignment options are drawn upon the prior alignment research (Weill and Broadbent, 1998; Luftman, 2000; Reich and Benbasat, 2000; Hirschheim and Sabherwal, 2001; Chan, et al., 2006; Kearns and Sabherwal, 2006-7; Tallon, 2007-8; Iizuka and Iizuka, 2010).

4.1 Phase One: Developing Alignment Vision

First of all, a company must develop vision for alignment. Table 1 shows AOG in phase one.

Table 1: AOG in phase one.

(1) value discipline
1.price 2.speed 3.premium 4.quality 5.performance 6.selection 7.convenience
(2) business scope
1.cost leadership 2.balancing cost and differentiation 3.differentiation
(3) distinctive competencies
1.supplier relations 2.production and operations 3.product and service enhancement 4.marketing and sales 5.customer relations
(4)-1 business governance: term
1.long-term 2.short-term
(4)-2 business governance: interaction
1.facilitator 2.participant
(5) IT scope
1.efficiency 2.effectiveness 3.transformation
(6)-1 systemic competencies: data access
1.business unit level 2.enterprise level 3.inter-enterprise level
(6)-2 systemic competencies: communication
1.below average 2.average 3.above average
(6)-3 systemic competencies: hardware and software
1.below average 2.average 3.above average
(6)-4 systemic competencies: system reliability
1.below average 2.average 3.above average
(7)-1 IT governance: sourcing
1.insourcing 2.selective sourcing 3.outsourcing
(7)-2 IT governance: structure
1.centralized 2.shared 3.decentralized
(7)-3 IT governance: benefits
1.cost 2.balancing cost and value 3.business value

A company selects appropriate strategic options and coordinates among the choices. Value discipline-driven integration between business and IT strategies is achieved through these processes in phase one. The outcome of phase one is to clarify a direction of alignment implementation.

4.2 Phase Two: Designing Alignment Foundation

Table 2 shows the three components and infrastructural options in phase two. In phase two, a critical success factors for business-IT alignment needs to be achieved.

The effectiveness of alignment foundation determines the effectiveness of business-IT strategic integration and of business-IT operational fusion. Each choice is made in the light of their own business context. The purpose of this phase is to develop foundation for business operation and IT use. Infrastructural choices pertaining to business and IT are simultaneously made in each component. A company can understand current status of business and IT infrastructures, and define to-be foundation for value proposition by using AOG in phase two.

Table 2: AOG in phase two.

(8)-1 enterprise architecture: the scope of business process standardization and integration
1.not defined 2.partly defined 3.fully defined
(8)-2 enterprise architecture: the type of operating model
1.diversification 2.coordination 3.replication 4.unification
(8)-3 enterprise architecture: the scope of IT architecture standardization and integration
1.not defined 2.partly defined 3.fully defined
(8)-4 enterprise architecture: data standardization and integration
1.not defined 2.partly defined 3.fully defined
(8)-5 enterprise architecture: communication standardization and integration
1.not defined 2.partly defined 3.fully defined
(8)-6 enterprise architecture: technology standardization and integration
1.not defined 2.partly defined 3.fully defined
(8)-7 enterprise architecture: application standardization and integration
1.not defined 2.partly defined 3.fully defined
(9)-1 structure: business managers' participation in IT planning
1.inadequate 2.moderate 3.adequate
(9)-2 structure: IT managers' participation in business planning
1.inadequate 2.moderate 3.adequate
(9)-3 structure: setting up the steering committees including users and IT staff
1.inadequate 2.moderate 3.adequate
(9)-4 structure: formal communication between business and IT units
1.inadequate 2.moderate 3.adequate
(9)-5 structure: informal communication between business and IT units
1.inadequate 2.moderate 3.adequate
(9)-6 structure: the relationship between business planning section and IT unit
1.independent relations 2.belonging to the same higher level organization 3.IT section is located under business planning section
(10)-1 skill: senior executive support for IT
1.inadequate 2.moderate 3.adequate
(10)-2 skill: top managers' knowledge of IT
1.inadequate 2.moderate 3.adequate
(10)-3 skill: IT managers' knowledge of business
1.inadequate 2.moderate 3.adequate
(10)-4 skill: IT unit's ability to offer reliable IT services
1.inadequate 2.moderate 3.adequate
(10)-5 skill: IT unit's ability to keep up with IT progress
1.inadequate 2.moderate 3.adequate
(10)-6 skill: IT unit's ability to respond to business needs
1.inadequate 2.moderate 3.adequate
(10)-7 skill: IT success experience in the company
1.inadequate 2.moderate 3.adequate
(10)-8 skill: senior executive's ability to prioritize IT projects
1.inadequate 2.moderate 3.adequate

4.3 Phase Three: Fusing Business Operation with it Utilization

Operational alignment options are shown in Table 3.

Table 3: AOG in phase three.

(11)-1 operation: the optimized IT portfolio for value discipline realization
1.not optimized 2.partly optimized 3.well-optimized
(11)-2 operation: the users' skill acquisition for IT use in core business processes
1.inadequate 2.moderate 3.adequate
(11)-3 operation: business metrics are related to IT
1.not related 2.partly related 3.well-related
(11)-4 operation: IT metrics are related to business
1.not related 2.partly related 3.well-related
(11)-5 operation: risk and rewards are shared between business and IT units
1.not shared 2.partly shared 3.well-shared

A company needs to ascertain suitability of IT portfolio for core business processes. Users in core business processes need to acquire an appropriate IT utilization skill. Alignment implementation in phase three includes the options relevant to evaluation. Risk and rewards need to be shared between business and IT units.

5 CONCLUSIONS AND FUTURE RESEARCH

This study revisits SAM of Henderson and Venkatraman and proposes a new framework for alignment implementation. SAM is reinterpreted and extended by introducing the results of the prior alignment research. This study also offers "Alignment Option Generator (AOG)" as a guideline for supporting alignment practices.

Actual alignment implementation is more complicated. Alignment implementation involves IT projects prioritization, coordination between corporate and business-unit management, and choices for the scope of standardization and integration pertaining to business and IT. It is necessary to clarify methodologies for addressing effectively these issues. In addition, business-IT alignment profiles and differences of alignment implementation among companies also need to be empirically examined.

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