

IT Business Strategy Alignment: Concept, Model and Maturity

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Abstract—For the past decades, IT-business strategic alignment has been seen as the mean to leverage the business of organization to a new dimension above its competitors. Yet, there is no silver bullet for doing IT-business alignment right. Nonetheless, typical organizations have very ambiguous idea about utilizing their IT infrastructure to support the business strategy thus they have no clue about the return of investment on IT. The confusion then leads to hesitation in the use of IT to support the business of organization. Consequently, an organization cannot achieve their competitive advantages over other competitors. The objective of this paper is to give a holistic view about IT-business strategic alignment by defining its concept, its generic model, and its maturity assessment model. By which, particular organization can have the general idea about IT-business strategic alignment framework, therefore, achieving some know-how on implementing this framework to their own business.

I. INTRODUCTION

As today's market is dynamic, the competition between organizations has become more intensity than ever. In order to survive and thrive, one has to achieve the competitive advantages over the other competitors. Over the past decades, IT has becoming more and more important to organizations. Indisputably, one particular organization treats IT as the mean to define and leverage its business strategies, to build reliable partnership network, to allocate scarce resources, and to create distinctive value proposition. IT helps organization differentiate its business from others. However, aligning IT strategy with business strategy in order to achieve the competitive advantages is not easy task. Lately, many researchers have indicated that the organization's performance depends on the IT-Business alignment. The more mature business-IT strategic alignment of one organization becomes the better that organization performs.

Many frameworks and models have been given by researchers in order to help top managers to align their organization's business strategy with their IT strategy. In this paper, we will discuss on the concept of IT-business strategy alignment proposed by J. Luftman, J. Henderson et al. The concept of strategic alignment and its model are explained in the first section. The second section discusses about dominant strategic alignment perspectives. And the last section describes the current viewpoints of alignment and its maturity

II. STRATEGIC ALIGNMENT – CONCEPT AND MODEL

Strategic Alignment concept was born from the need of utilizing IT efficient and effective. In many organizations either the IT doesn't support the business strategy or the business doesn't use existing IT at its full capacity. This fact made the alignment between IT and organizational strategies a top priority for the CIOs in both private and public areas.

Business and IT strategies can be considered aligned when “business objectives are enabled, supported and stimulated by information technology strategies” [2]. However it is not the technology itself which created value but the business processes that make good use of the technology.

Strategic Alignment is a technique for analyzing and derives the direction that needs to be followed by an organization. However, strategic alignment is not a single step to be completed but a continuous sequence of transformations which affects both business and IT sides.

Strategic Alignment is also defined using two concepts: Strategic Fit and Functional Integration applied to the organizational strategy, IT strategy, organizational infrastructure and IT infrastructure and processes. The Strategic Fit represents the vertical alignment between Business Strategy and organizational infrastructure and similarly between IT strategy and IT infrastructure. The organization has to be able to adjust their position into the external marketplace and for this, the internal structure has to be able to be reconfigured in such a way that will support / fit in the best way this strategy of locating the best place into the market. In completion to the Strategic Fit the Functional Integration extends the relationship across functional domains. As business strategies are changing all the time the IT strategies and processes have to be kept aligned with the changes, also when IT strategy drives a change the business strategy has to react to be able to optimal use the new IT strategy.

Also the alignment should take into account both external and internal domains. The external domain is the business environment where the organizations are preoccupied with decisions regarding offerings, strategies, alliances and partnerships. However the internal domain deals with redesign of critical business process, human resources, administrative structures and development of organizational competencies.

Strategic Alignment Model presents a strategy landscape focused on Organizational, Technology, External and Internal views of an organization. There can be identified four perspectives of strategic alignment based on the cross-

domain relationship between the four domains.

III. DOMINANT STRATEGIC ALIGNMENT PERSPECTIVES

The strategic perspectives reflect the relation between three key domains (components) considering an interplay that involves both functional integration and strategic fit. The strategic perspective is formed of three components:

- Domain anchor - the driver of change.
- Domain pivot - the problem being solved.
- Impacted domain - the part affected by the change in the Domain pivot.

There are four dominant strategic alignment perspectives divided into two categories: one has business strategy as the driver, and another has IT strategy as the enabler.

1. Competitive Potential

Table 1. Competitive Potential	
The Anchor Domain	I/T Strategy
The Pivot Domain	Business Strategy
The Impacted Domain	Organizational Infrastructure

It reverberates how new technology can create competitive advantage if it is used by business strategies. This perspective presents how IT may influence the business strategy and further trigger the re-engineering of organizational infrastructure. The focus here is to extend the knowledge, to identify and discover new opportunities, to innovate and be ingenious with the IT. The use of rapid prototyping can be a way of testing the technology change in the business environment.

2. Technology Potential

Table 2. Technology Potential	
The Anchor Domain	Business Strategy
The Pivot Domain	I/T Strategy
The Impacted Domain	I/T Infrastructure

It claims how new business strategies is using I/T strategies in order to get competitive advantage. The change in the business has to be first fitted with I/T using functional integration and further replicate the change to I/T infrastructure using the strategic fit. This is considered to be a “top-down” approach and the executive has to be sure that the technologies, systems and people can be aligned in order to adopt the changes. The technique of rapid prototyping can be very valuable here for getting early feedback from the business environment.

3. Strategy Execution

Table 3. Strategy Execution	
The Anchor Domain	Business Strategy
The Pivot Domain	Organizational Infrastructure
The Impacted Domain	I/T Infrastructure

It treats the risk of technology failure in an enterprise or how

to build and sustain a “world-class business” within a business. The main focus is to ensure that the organization can use the technology products and services. Strategic management has to respond to customer needs and balance the sort-term requests with long-term investment based on the priorities and direction set. The responsibilities are here in the IT area and the approach is centered on I/T organization which needs to manage and react to new trends and changes structures.

4. Service Level

Table 4. Service Level	
The Anchor Domain	I/T Strategy
The Pivot Domain	I/T Infrastructure
The Impacted Domain	Organizational Infrastructure

The approach here is that even if the IT supports the business, it doesn’t have an influence the business strategy. This is a “top-down” approach and the role of top management is to communicate and articulate the business strategy. Another characteristic is that business strategy has to trigger the development of IT systems and infrastructure. The table 5 and 6 summarize the role of top and IT management along with their role’s descriptions.

Table 5. Description of Top Management’s Role	
Role of Top Management	Role’s Description
Business Strategy as the driver	
Strategy Formulator	Formulate the logic, choices regarding the business strategy
Technology Visionary	Vision the technologies that support the business strategy
IT Strategy as enabler	
Business Visionary	Define the impact of emerging IT competencies and functionalities and changing governance patterns on business strategy
Prioritizer	Define best way to allocate the scarce resources within organization and in IT market place

Table 6. Description of IT Management’s Role	
Role of IT Management	Role’s Description
Business Strategy as the driver	
Strategy Implementor	Design and implement the IS infrastructure supporting the business strategy
Technology Architect	Design and implement the IS infrastructure that is consistent with the IT vision
IT Strategy as enabler	
Catalyst	Support business managers

	to understand opportunities and threats from an IT viewpoint
Executive Leadership	Ensure the success of internal service business accordingly to top management's operational guidelines

IV. VIEWPOINTS TO ALIGNMENT AND ITS MATURITY

In order to assess the maturity of Business-IT strategy alignment, professor Luftman has introduced Strategy Alignment Maturity model [3]. This model consists of six alignment maturity criterion along with five levels of maturity.

Six Alignment Maturity Criteria

1) *Communication*: the effectiveness of information exchange between IT and business organizations will be measured to determine the understanding of business by IT and vice versa.

2) *Value*: the business metrics, IT metrics, and metric for assessing both IT and business will be used to determine the contribution of IT organization to business.

3) *Governance*: determination of who has the right to make decision and what processes that they will use at different levels to identify the order of importance in procuring the IT resources.

4) *Partnership*: business's awareness of IT contribution, the relationship between business and IT organization, and the degree of consensus in goal, of mutual trust between them will be measured in this component.

5) *Scope and Architect*: the abilities of IT organization in flexibly providing the infrastructure, evaluating and managing the newly emerging technologies, facilitating changes in business process will be assessed.

6) *Skill*: practices regarding human-related topics, such as retention, hiring, training, career crossover, etc., along with the organization's readiness against changes, learning, leveraging new ideas will be gauged.

The Level of Alignment Maturity

1) *Initial or ad-hoc processes*: There is no aligned IT-business strategy, no career crossovers, and no business sponsor. The communication between organizations is poor. Organizations do not realize contribution of one another. Their relationship is rigid. IT is viewed as cost oriented and focused on supporting the back-office.

2) *Committed processes*: Relationship between IT and business has been enhanced. Even though, they have not fully understood each other's roles and responsibilities. Alignment focuses only on functions, department or geographical locations. IT is viewed as technical and cost oriented. And there is no link between IT and business metrics. The interactions between IT and business are transaction-based. There are some career crossovers at

function level. Technical skill is considered the most important of IT.

3) *Established, focused processes*: At this level, IT organization present everywhere in organization. The understanding between IT management and business management is being established. The use of SLA appears throughout the organization. IT emerges as important asset to business. Even though, IT is view as cost oriented, its investment potential has been realized. The appearance of business sponsor and career crossover denotes this level of maturity. Technical and business skills become important to managers.

4) *Improved, managed processes*: Several processes of strategic alignment have been carried out. The gap between understanding of IT organization and business organization has been closer than before. IT has taken part in decision support and appeared as value asset. IT has been viewed as "value service provider and as an enabler of changes" [3]. Organization leverages its IT infrastructure to achieve the competitive advantage. SLA has been used widely. IT and business share risks with each other. Career crossover along with technical and business skills become very important to the organization.

5) *Optimized processes*: IT-business strategy alignment has been optimized and carried out across the organization. IT leverages the organization's partners and customers. Organization shares the knowledge, metrics to external entities such as partners, customers, suppliers, etc. IT extended its "reach to encompass the value chains external customers and suppliers" [3]. The relationship between IT and business tends to be informal and effective. "Strategic business and IT planning are integrated across the organization, as well as outside the organization" [3].

V. CONCLUSION

IT is getting more and more in the critical core of every important business. The need for aligning IT and business strategies and minimizing the risks and optimizing the use of IT is becoming the priority of most companies' boards. Strategic Alignment Model is a framework that can be used for achieving this alignment in order to make sure that innovation, extension of knowledge and using of available opportunities can be easily used for competitive advantage. In the holistic view over any business the IT should appear as a reliable pillar that supports and enables the business model and it is ready to embrace further business changes smoothly.

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