Strategic Positioning of IT in Global Organizations: A Visual Mapping Approach

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STRATEGIC POSITIONING OF IT IN GLOBAL ORGANIZATIONS – A VISUAL MAPPING APPROACH

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Abstract

Executives in large global corporations are faced with a number of non-alternative decision parameters determining the strategic positioning of their IT units. These parameters include organizational structures, competence development and distribution among central and local levels, goal setting and type of value contributed to the organization. Although the existing body of research addresses these issues in numerous ways, the concepts have not been fully applied in practice.

This paper proposes a tool for strategic positioning of IT in large global companies. It contributes to the overall understanding of the role of IT in value creation from a business process perspective, and at the same time practitioners may use it to diagnose, communicate and plan IT positioning in their companies.

The tool consists of visual maps assigning different steps of the business process management lifecycle to either central or local departments of a company. In this approach, eight strategic IT positioning scenarios are defined. For each scenario, characteristics, examples of companies using it, as well as required competencies are defined. The paper concludes by highlighting applications of the tool and identifying possibilities for future research.

Keywords: IT governance, IT competencies, IT/Business alignment, visual mapping, business process lifecycle
1 INTRODUCTION

Contemporary economic trends pose great challenges for organizations willing to serve the global market. Worldwide presence requires a great amount of process coordination in terms of managing supply chains, knowledge flows and human capital. The evolving customer needs increase internal diversity of global companies who expand their operations to new business areas and industry markets. The strain is especially felt by the central IT departments because they interact with all the business units across the geographic and industrial markets where an organization is present (Luftman et al. 2004). Strategic positioning of IT within global companies is therefore a complex task faced by today’s CIOs.

Academic literature, backed by industry best practices, has addressed this issue in a number of ways. For example, the field of IT governance has dealt with possible and appropriate governance structures that IT units ought to adapt in order to retain the necessary business proximity while reducing cost. Alignment literature points out how IT can best cooperate with the rest of the organization in achieving common objectives. Finally, IT project management literature prescribes how to manage IT-related initiatives from cradle to implementation and review.

Nevertheless, in spite of the fact that in many of these areas the discussion has reached relative maturity, the results have not sufficiently been conveyed into practical applications. Present research reveals that there is a need for guiding concept application in industry. For example, Fink and Ploder (2008) point out that only a handful of companies use IT governance systems. Similarly, Luftman (2009) argues that the issue of alignment between IT and business sides of the organization is constantly ranked high among issues that are most troublesome for CIOs.

This paper addresses this gap by developing a model enhancing the understanding of positioning of IT in large global companies. The model can be used by CIOs and business executives to configure IT for maximizing business value creation. Through a literature review, it identifies a set of parameters which determine the strategic positioning of IT units. Subsequently, a visual mapping technique is developed to help CIOs determine the current positioning of their departments in the organization and identify room for improvement. Finally, the technique is used to derive a set of eight core scenarios. These scenarios are the main contribution of the paper as they correspond to distinct, high-level strategies which can be used for positioning IT departments within global companies.

2 LITERATURE REVIEW

In order to navigate through the diversity of research streams into the topic, a literature review is carried out to identify related work. The review covers academic publications as well as the most prominent industry best practices. It is organized into five respective topics: governance structures, IT/business alignment, IT competence development, project management and efforts towards developing holistic frameworks to strategically position IT units.

Dating back to as far as the 1960s, the discussion of centralized vs. decentralized organizational structures in IT governance is perhaps one of the most mature ones in the IS field. Initially, most of the argumentation revolved around whether activities perceived as belonging to the domain of information systems should be centralized or performed locally in the business units. (Brown and Grant 2005) Subsequently, intermediate forms of governance surfaced, known as hybrid or federal governance. (Brown 1997) The variety of possible configurations has been defined (Brown and Magill 1998) and examined in terms of applicability factors (Sambamurthy and Zmud 1999). Within the industry, several versions of the CobiT framework (ITGI 2007), which is a bottom-up approach to developing governance and control mechanisms within an organization through the application of indicators, measures and recommended best practices. Eventually, the traditional IT governance approach was
criticized for being too function-oriented and thus failing to recognize other important determinants of
the success of IT organizations, such as relational and integration mechanisms, IT capabilities,
measures of success, and relationships with business units. (Schwarz and Hirschheim 2003)

Some of these issues have been addressed by researchers dealing with alignment of the IT function
and business units, whereas the two areas always stand as diverse and separate entities. Henderson and
Venkatraman (1999) consider business/IT linkages by breaking them into external and internal
components. Luftman et al. (1999) detail a set of factors driving and inhibiting alignment and develop
a model allowing assessment of each of them in an organization. Similar but higher level components
are presented in the work of Fonstad and Subramani (2009). The criteria used to construct these
models include understanding of IT by the business and vice versa, fostering collaboration or
relationship management between the two, emphasize the importance of linkages, or deliberately built-
in interaction points between the two areas. These linkages are detailed in models by Fonstad &
Robertson (2006) and Preston & Karahanna (2009) as these works focus on IT/business alignment
between corporate, divisional and project levels, as well as CIO and top management levels.

With the expansion of possible structures and processes which an IT unit can make use of comes the
recognition that each of those configurations can yield a different output to the organization. Types of
business value creation and development of corresponding competencies by IT staff define another
dimension of decisions related to strategic IT positioning. Sambamurthy and Zmud (2000) propose
that IT competencies are an integral part of an organizing logic for the IT activities of every enterprise.
At the same time, Peppard et al. (2000) identify as many as 26 kinds of competencies which an IT unit
can bring into an organization. To help organizations manage and implement these competencies, a
number of industry standards have been developed. Some of them, such as Information Technology
Infrastructure Library (ITIL) (OGC 2007) provide a holistic approach to managing IT services in an
organization by covering issues ranging from strategy and design to implementation. Others focus on a
single competence, such as the 27000 family of the ISO standards (ISO/IEC 2009), which provide
guidelines related to information security.

However, perhaps the most operational stream of research aimed at strategic positioning of IT is
project management. The advancements in this area range from outlining practitioner-oriented key
success factors in IT project management (Nelson 2007), to using mapping tools for measuring the
amount of focus projects receive (Nelson and Jansen 2009), to developing frameworks subjecting IT
projects to particular organizational goals, such as enterprise innovation (Markus 2004).

Because those areas deal with different organizational levels in relative separation, much of the
contemporary work focuses on attaining a holistic view. Efforts are made to create a consistent
approach spanning operational and strategic levels of IT and business. (Fonstad and Robertson 2006;
Fonstad and Subramani 2009; Preston and Karahanna 2009; Ross et al. 2006; Weill and Ross 2004).

As the literature study reveals, there are a number of parameters which IT and business executives
need to consider in order to position IT units within organizations. They can be divided into
organizational structures, competence development and distribution, goal alignment and value
creation. These parameters are interconnected and operate on corporate, business unit and project
levels. Therefore, they constitute a comprehensive toolbox that CIOs might use in order to drive the
development and positioning of their organizations to maximize business value for the entire
enterprise. However, evidence exists that many of these concepts have failed to be transformed to the
level of practical use. Recent studies show that the use of IT governance practices in some of the
highly developed economies remains at a low level, even in large organizations (Fink and Ploder
2008). What is more, IT/business alignment, competency development in IT, value creation through
information and change management remain at the top of IT management’s list of concerns in recent
years (Luftman 2009). Therefore, additional effort is needed to materialize the research potential in
companies by providing IT executives with adjustable tools to diagnose and improve the situation of a
specific company.
This paper addresses these issues by creating a managerial visual tool to help organizational decision makers define, set, develop and organizationally assign the roles and competencies required to facilitate and support efficient cooperation and support between business and IT using a process-oriented approach. The model is embedded in the federal IT governance structure. It contributes to the IT/business alignment stream by providing a business process lifecycle perspective on IT activities. Depicting various scenarios, the model provides a set of capabilities that lie within the responsibility of the IT and the business units, thus redefining the value proposition of the former. By mapping sequences of activities, it determines where the organization should develop linkages to hand over responsibilities and drive the development processes. Finally, the model contributes to the project management stream by extending the research domain to situations which lead to a project launch. As shown later, the nature of those situations can profoundly influence the character of the project.

From this point onwards, the paper structure is as follows: first, the research method is introduced and building elements of the model are defined. Subsequently, the visual elements of the model are introduced, followed by the way of combining them. Finally, the model is used to outline a number of strategic scenarios which can provide a more detailed frame of reference for particular organizational settings, making is usable for managers.

3 THE CONSTRUCTS

This paper sets out to develop a model constituting the division of roles and competencies among key organizational stakeholders and subsequently define a set of scenarios for strategic positioning of IT units. It is a part of a larger research project rooted in the design research tradition, whose ambition is to design and evaluate a solution (Walls et al. 1992). This paper focuses on the design element only, and its scientific outcome is a set of IT artefacts consisting of constructs (vocabulary and symbols) and a model (abstraction and representation) (Hevner et al. 2004).

This section outlines the organizational levels used in the model to determine responsibilities and assign corresponding groups of activities. Competencies are understood as organizational-level resources directed towards strategic purposes of the organization forming organizational capabilities (Peppard et al. 2000). Groups of activities pertain to aggregated tasks related to process lifecycles. Assigning these tasks to organizational levels creates specific roles requiring distinct competencies. The paper’s design perspective is reflected in the use of organizational levels and process lifecycle stages as constructs. Their combinations representing strategic positioning of IT form a model.

3.1 Defining the organizational levels

That two organizational roles exist in relation to IT is widely recognized in the literature. For example, Brown (1997) discusses the distribution of IT-assigned activities between a central and local level. Braganza and Lambert (2000) consider the issue of governance level in relation to business processes. Ross et al. (2006) distinguish between various operating models based on whether the responsibilities for process and IT-related decisions are allocated centrally or locally.

Similarly, the central and local levels are the first axial concept for building the model. The underlying assumption is that both process and IT-related activities are performed within the same organizational unit. Within large global organizations, this differentiation depicts the relationship between the corporate headquarters (central) and regional offices, business units or particular corporate outlets.

In some cases the differentiation between central and local levels might not be sufficient to describe the reality of some companies with highly complex structures. For example, if business and process-related decisions are dispersed among central, divisional and business-unit levels, in order to fully represent the complex ownership relations it might become necessary to add another organizational level to the organizational ladder. In such cases, a suitable extension of the model can be made if considered appropriate by companies using it.
3.2 Process-related activities

In order to outline the distribution of roles constituting the strategic IT positioning model, it is necessary to develop a set of generic tasks assigned to those roles. To do so, a business process driven approach is used, which is generally viewed as a linking mechanism between business and IT (Davenport 1993). Using processes as a common denominator thus helps balance the focus between IT and business, creating a model for strategic IT positioning within global corporate structures, rather than a tool to be used either by business or IT units.

A business process is a set of activities, designed to create value for a customer or a market. It has a beginning and an end, inputs and outputs which together constitute a structure for how work is carried out (Davenport 1993; Hammer and Champy 1993). This broad definition accounts for the variety of tasks in organizations, which represent different degrees of formality and structure (Keen and Morton 1978). Some authors even distinguish between processes which are “art” or “science” depending on the intensity of standardization efforts made by a company (Hall and Johnson 2009).

In this paper processes are considered to be sets of activities which are performed, regardless of whether or not they have been discovered and formalized by a specialized unit in the organization. In companies with a highly decentralized business structure, this issue is especially relevant, because the development of many processes is locally driven to meet the evolving demands of the business, such as changing customer demands, technical capabilities, etc. Process formation is therefore considered to be the first step in an organizational process lifecycle, independent of the origins or the driver forming the process.

As a next step, companies typically look at the processes, subjecting them to analysis, standardization and quality checking (Davenport 2005). They develop special competencies in order to analyze, discover, model, improve and redesign the work (Georgakopoulos and Tsalgatidou 1998; Snabe et al. 2009; Zur Muehlen 2004). The underlying purpose of these activities is to wrap up the processes in an IT solution in order to achieve time, cost, quality and visibility-related benefits. Formalizing and modeling the processes is required in order to create associated application specifications and data models (Johannesson and Perjons 2001), whereas the design effort, apart from the business requirements, is also influenced by the existing systems and process landscape (Strnadl 2006). In this paper, the overall set of activities aiming at capturing, modeling, redesigning, formalizing, automating and integrating the processes with the IT and process landscape is recognized as the second important part in the organizational process lifecycle and referred to as process standardization.

Process lifecycle models typically identify another, stable stage, when a process is well-established and optimized, and the main efforts focus on process execution, including performance of the actual tasks constituting a process, as well as support activities (Snabe et al. 2009; Zur Muehlen 2004). Although the discussion of whether to centralize or delegate a process is valid, this paper is delimited to enhancing the understanding of strategic IT positioning. Therefore discussions of centralized versus local human resources, customer support, product development, etc. are not included in this paper.

However, support activities such as process monitoring, automatic dynamic optimization, exception handling, quality assurance and execution of automated tasks are located where the ownership of the performing systems lies. Taking order handling as an example, staff contacting the customer may be present locally, in the business, or centrally, dealing with orders from customers of all the business areas. However, all the software systems and applications which they use to support the process (e.g. retrieval of customer information) or automatically perform tasks (e.g. invoicing), may be owned by a particular business unit, i.e. locally, or the centralized IT department, i.e. centrally. This logic is used for construction of the roles in the strategic IT positioning model. Therefore, process execution is identified as the final stage of the organizational process lifecycle, emphasizing the delimitations pertaining to IT and process-related activities resulting from the above discussion.

Summing up, the following activity groups are used to determine the organizational roles in the model:
• Process formation – the “birth” of a process marked by the time when the activities constituting it begin to be carried out, regardless of the driving force.

• Process standardization – activities aimed at capturing, modeling, formalizing and redesigning the process, as well as subsequent automation and integration with the existing processes and systems.

• Process execution – the automated support and execution activities carried out by software systems.

There are alternative ways of defining the tasks, and they are no less valid than this particular approach. For example, one can differentiate between process formalization and process automation as separate activities. One can increase the granularity level even more by looking at discovery, modeling and redesign separately. Another possibility is to include process execution or process retirement as separate stages. These approaches are all valid as long as they make sense in a particular organizational setting. Given the objectives of this paper, this condition is met if the managers defining the strategic positioning of IT consider them to be important to their particular organization.

4 THE STRATEGIC IT POSITIONING MODEL

In order to develop the model, the previously defined constructs are combined into higher level structures by creating sets of relationships among them (March and Smith 1995). This is done using the visual mapping strategy which is one of seven generic strategies for sensemaking with process data. (Langley 1999) Visual mapping is suitable for dealing with a high number of dimensions and depicting the relations of precedence. For that reason, it serves well the purpose of combining process lifecycle stages across multiple organizational levels. Furthermore, it is commonly applied by both managers and academics as a communication tool to collectively make sense of events and learn from various stakeholders’ perspectives (Nelson and Jansen 2009). Therefore, visual mapping can facilitate and streamline the process of creating a common view of strategic positioning of IT across the central and local levels of large organizations.

The strategic IT positioning model defines roles by assigning groups of activities to particular organizational levels within a company. In this case, two organizational levels are defined: central and local. The organizational levels are mapped by being placed one below another in a visual diagram, as presented in Figure 1.

Figure 1 Mapping of levels involved in the model.

Roles are created by assigning groups of activities to the organizational levels. These groups stem from process lifecycles and encompass process formation, standardization and execution. Assignment of a certain group of activities to an organizational level is mapped by placing a circle representing a group of activities adjacent to the organizational level responsible for it (see Figure 2).

Figure 2 Creating roles by assigning groups of process-related activities to organizational levels.

Another relation created among constructs is progression. It is defined according to the consecutive occurrence of the stages in the process-lifecycle approach. The sequential relationship is mapped by placing an arrow between the preceding and following groups of tasks (see Figure 3).

Figure 3 The progression relationship among tasks.
Since the arrows represent connections between process-related groups of activities tasks, and those groups can be assigned to various organizational levels, they also represent interfaces among those levels. This is similar to Fonstad et al.’s. (2006) idea of “linking mechanisms” being one of the central components of their IT engagement model. The depiction of the progression relationship is an important factor for the model also because it indicates that tasks assigned to various roles cannot be viewed separately. This means that if a certain task is assigned to a particular role while other tasks switch their designation, the two situations require a different set of competencies from each organizational level and should thus be viewed as separate scenarios built using the model.

The model is built by assigning numbers to the various process-related activities. Process formation is marked as number 1, process standardization as 2, and process execution as 3. Placing a number in a circle makes it possible to visually map the activities using the method described above. The first case covered by the model is constituted by assigning all the activities to one level. In this case, it means that process formation, standardization and execution are all assigned to the central level, as presented in the figure below.

![Figure 4 A strategic IT positioning model representing the scenario in which all the process-related groups of activities are assigned to the central organizational level.](image)

Moving along this line, there are a total of eight possible combinations which can be achieved by assigning the groups of activities to organizational levels. They are named and presented in Figure 5.

![Figure 5 The eight scenarios built using the strategic IT positioning model.](image)

The figure shows the eight strategic generic scenarios which can be identified using the strategic IT positioning model. At the top the numeric representation of the process activities is presented. The numbers in circles represent the activities in a scenario. Each of the combinations represents a different approach to assigning roles and responsibilities to the organizational actors and determines competence requirements. An outline of the eight scenarios, including the roles, description, examples and required competencies is presented in Table 1. The roles, description and examples are based on the characteristics of the scenarios derived using the modeling approach. The competencies associated with roles are derived from the framework by (Peppard et al. 2000).
<table>
<thead>
<tr>
<th>Strategic Scenario</th>
<th>Roles</th>
<th>Description</th>
<th>Examples</th>
<th>Required competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full unification</td>
<td>Central: formation,</td>
<td>This scenario is based on a strongly centralized governance structure. All</td>
<td>Retail store franchises using the same set of processes and systems</td>
<td>The central organizational level claims responsibility for the full process lifecycle. In order to provide the right solutions, it must develop competencies to follow market trends and the evolving needs of the local business, as well as be able to develop and implement solutions.</td>
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<tr>
<td></td>
<td>standardization, execution</td>
<td>decisions related to how the local level operates are taken centrally.</td>
<td></td>
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<tr>
<td>Experimentation</td>
<td>Central: standardization and</td>
<td>In this innovation-focused scenario, the local level is given freedom to</td>
<td>Companies with market-responsive supply chains (Fisher 1997).</td>
<td>The local level must stay in tune with local market needs and develop processes backed up by IT solutions on an ongoing basis. This requires a high degree of business agility and IT solution development competencies. The central level is responsible for transforming the processes and solutions into the overall solution landscape. It deals with architectural issues by managing a platform accommodating a diversity of needs.</td>
</tr>
<tr>
<td></td>
<td>execution Local: formation</td>
<td>take up initiatives that best suit their specific needs. The unsuccessful</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>initiatives are screened out and the central level overtakes the successful</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ones to ensure their conformance with the global process and systems</td>
<td></td>
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<tr>
<td>Replication (legacy</td>
<td>Central: formation and</td>
<td>This scenario assigns the standardization responsibility to the local</td>
<td>Companies in transition period following M&amp;As</td>
<td>The central level takes over business responsibilities for the local level by defining the strategy and goals. In order to support the new processes, the local level needs the abilities to deploy the processes using the legacy systems in their organization.</td>
</tr>
<tr>
<td>integration)</td>
<td>execution Local:</td>
<td>level. Once the solutions are operational, responsibility for maintenance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>standardization</td>
<td>of the systems is assumed by the central level.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centralized governance</td>
<td>Central: formation and</td>
<td>This scenario assumes a strong position of the central organization,</td>
<td>Companies selling unified products and services in geographically dispersed and diverse markets.</td>
<td>The central level needs in-depth market knowledge across the entire organization as well as knowledge of existing local process- and IT-solutions. Since the local level needs considerable knowledge of the processes and systems deployed, the central level must possess the necessary communication and training capabilities.</td>
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<tr>
<td></td>
<td>standardization Local:</td>
<td>claiming responsibility for the business initiatives and ensuring their</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>execution</td>
<td>technical conformance. Once this is achieved, the central level steps back.</td>
<td></td>
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</tr>
</tbody>
</table>
| Distributed development | Central: execution  
Local: formation and standardization | In this scenario, the local level identifies the business direction and develops the processes and IT solutions. The central level is responsible for executing them. | Companies offering a portfolio of online services using specialized business areas responsible for development. | In this scenario, the local level needs to take responsibility for business decisions as well as technical developments. The central level is responsible for brand management and high-level architectural decisions. |
|-------------------------|----------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Technology consulting   | Central: standardization  
Local: formation and execution | In this scenario, the local level is responsible for business activities and running the technology. The central level is involved as a service provider, stepping in when business requires process consulting and development of the technology solution. | Low-technology companies striving to reduce the cost of IT | As a service provider, the central level needs to develop a customer-oriented approach to positioning itself in the global organization. Since it is the local level that decides on the initiatives, the ability to understand those needs and address them with the right solution lies with the central level. |
| Technology innovation   | Central: formation  
Local: standardization and execution | The responsibility for taking new initiatives lies with the central level. The local level is responsible for developing and executing them in their local environment. | Homogenous service companies depending heavily on the ability to innovate their business processes | The central level is responsible for screening technological advancements and developing innovative solutions. It needs to have the communication skills to push the high-level vision and the power to enforce it. The local level needs the ability to deploy the new processes using the existing solutions and maintain the new processes. |
| Full process delegation | Local: formation, standardization and execution | In this scenario, the local level is responsible for all of the process lifecycle activities. | Highly dispersed companies working across diverse business models and markets | In this scenario the local level needs to have the full range of capabilities to take business initiatives and realize them through process and IT solution development. The need for communication and high level architectural decisions is limited due to the confined organizational scope. |

*Table 1 Elaboration of the eight scenarios built using the strategic IT positioning model.*
5 APPLICATIONS OF THE MODEL

There are a number of potential applications of the model. Perhaps the most prominent one is to act as a communication tool creating a common language for practitioners with different professional and organizational backgrounds. The model can be used to assess the current positioning of IT within an enterprise. In order to carry out mapping, it is necessary to consult IT and business project managers involved in past and ongoing development projects. This makes it possible to illustrate the gaps between the desired and current strategic IT positioning in a company. Managers might become aware that the currently used model is not compatible with the overall business strategy or with the competencies currently developed in the organization. Revealing such gaps leads to the development of an action plan geared for alignment. The diagnosis of existing strategic IT positioning models can also be used to identify incomplete scenarios. For example, if a company is willing to use experimentation strategy to become innovative, but there are no mechanisms or procedures for the central unit taking over well-functioning solutions, there is a threat that the company might fall into distributed development or even full process delegation scenarios instead. Identifying such gaps can lead to preventive action enabling better control over IT in the company.

Finally, the model can be used to compare different parts of the organization in terms of expectations towards IT and the desired strategic IT positioning model scenario. Thus, differences can be revealed within the organization in terms of technological maturity or the degree to which business units utilize their technological potential. The results can be used to create a streamlined and standardized IT offering throughout the organization or develop additional competencies to approach business variety in customized ways. The changes initiated by the analysis of a strategic IT positioning scenario are reflected by a variety of documents in the organizations. Primarily, they will affect the organizational structure by determining which competencies should be placed locally with the business units and which should be centralized. Providing the correct linkages between the subsequent business process lifecycle activity groups has an impact on the operational policies of particular departments. The overall positioning of the IT unit can vary widely from innovation driver (IT innovation scenario) to infrastructure provider (distributed development). Positioning within one of the scenarios will also have a profound effect on the strategy policies of the department as well as the project methodology it uses.

6 CONCLUSIONS, LIMITATIONS AND FURTHER RESEARCH

The main contribution of this paper is to provide eight strategic scenarios along with the underlying tool. They can be used to model strategic IT positioning in global companies in order to improve executive decision making. The model uses a visual mapping technique to identify current strategic positioning scenarios, define which scenarios are most desirable in terms of the overall company strategy, and create a basis for an action plan for closing the gaps. To construct the artefacts and the model, the paper builds on prior research in IT governance and business process management. These two fields are used in combination to provide a holistic organizational approach to defining the model. Throughout model construction, the paper outlines the methodology which can be used to adjust the model to a particular organizational setting, e.g. by adding more process-related groups of activities or changing the number of organizational levels.

The work contributes to the IS research field in several additional ways. Building on previous work, a strategic IT positioning model is constructed which extends the scope of interest by including the business process perspective formation as an important supplement to the IT systems development perspective. The paper demonstrates a way of prioritizing the variety of business needs, which is a step towards using IT to facilitate strategic flexibility of companies. Haeckel (1999) calls this “sense-and-respond organizations”.

The model differs from the related work by introducing the temporal dimension into IS alignment. Although many authors recognize the importance of “early involvement” of IT in business planning (Fonstad and Robertson 2006; Luftman 2003), they do not provide a clear evaluation of how the strategic positioning of IT changes when there is “early” and “late” involvement. The presented model considers the involvement of IT on three respective stages of the business process lifecycle and defines the resulting differences in IT positioning scenarios. It is therefore suitable for assessing the temporal impact of IT involvement in business planning on the type of business value provided to the organization. Using the visual mapping technique is beneficial for creating a common language across the organization and for clear representation of complex relationships. However, this approach can possibly lead to oversimplification and loss of richness of data. Increasing the granularity of the model beyond a certain point using the outlined methodology is likely to lead to loss of data clarity. Furthermore, considering only process-related activities in the model excludes a number of other perspectives which can be important factors influencing the division of roles in the organization.

The paper does not include evaluation of the particular scenarios. It assumes that managers, especially IT managers, have a good understanding of how their organization should be positioned given the strategy. However, if this is not the case, the model cannot easily be applied without prior considerations regarding the strategic use of IT resources. Therefore extending the framework to include an assessment tool indicating which scenarios are more suitable than others in particular situations is a topic to be researched in the future.

Finally, as the aim of the paper is to propose a concept, it lacks the essential perspective of evaluation. The application of the model in an organizational setting and measuring its performance, impact and usability present future research opportunities.

References


