# IT ALIGNMENT: DIFFERENT FIRM TYPES, DIFFERENT ALIGNMENT CONFIGURATIONS

Research-in-Progress

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### Abstract

As opposed to the earlier IT-business alignment research where there appears to be a tendency to view realization of alignment through a simple universal approach and in line with the call to examine how the nature of alignment varies across firm types, this study discusses the IT-business alignment dimensions from the five ideal organizational archetypes perspective. The study suggests an integrative framework for IT-business alignment as a function of Mintzberg's five organizational archetypes. A qualitative case study research methodology is discussed. Enriching the model with the qualitative study and generalizing the results with a quantitative survey study will have important implications for theory and practice.

Keywords: Alignment, Strategic IS/IT management, Organizational design

# Introduction

IT-business alignment is defined as the degree to which the mission, objectives, and plans contained in the business strategy are shared and supported by the IT strategy (Reich and Benbasat 1996). Sauer and Yetton (1997) argue that IT-business alignment's basic principle is that IT should be managed in a way that mirrors management of the business. Since the 1980s, the IT-business alignment concept has been the subject of hundreds of scholarly and practitioner publications, and a priority for firms' officers (Chan and Reich 2007) due to its prominence (Labovitz and Rosansky 1997) and centrality in IS strategy realm (Galliers and Newell 2003). Though IT-business alignment is persistently characterized as number one concern to managers (Luftman et al. 2006), controversy over the attainability of IT alignment has been mounting since the 1990s. While many researchers are still defending the argument of the value and importance of IT alignment, others are calling for a total abandonment of this subject and argue for searching for other avenues of research to attain better utilization of IT/IS resources and better firm performances (Ciborra 1997). However, the underlying reasons for these arguments are not unique and the proposed solutions are not clear.

Several studies have discussed the issues and challenges facing the IT-business alignment domain highlighting the need for a new stream of research. Burn (1993) concluded that diverse organizational configurations influence the IT strategy approaches. Also, as cited in Chan and Reich (2007), Palmer and Markus (2000) found that 'one size fits all' strategic alignment theory is not accurate. Shams and Wheeler (2003) called for studying suitable alignment approaches for diverse organizational configurations. Noting the difference in alignment processes among entrepreneur-led firms, large bureaucracies, and small to medium-sized firms and the prior research findings and evidence, Chan and Reich (2007) called for further research focused specifically on firm types to discover the different alignment patterns. More specifically, they suggested Mintzberg's (1983) organizational archetypes as a helpful base for this research. In response to Chan and Reich's suggestion, we try to examine the nature of alignment as a function of organizational type. Therefore, our research question is:

What are the significant dimensions in IT-business alignment that capture the nature of effective ITbusiness alignment in each of the five organizational archetypes?

It may be noted that despite the huge popularity and enduring sustaining power of Mintzberg's five organizational archetypes (Lagrosen and Lagrosen 2003), evident by thousands of citations to his work over the past three decades, it is surprising that there has been practically no attempt in scholarly literature to use this as a basis to examine IT-business alignment. This study is, to the best of our knowledge, the first such attempt.

We discuss in the following section Mintzberg's five organizational archetypes, and then the dimensions of IT-business alignment as proposed by Luftman (2000). Then, we present our framework and discuss our hypotheses. Then, we propose our research methodology, discuss potential research implications, and provide a brief set of conclusions.

# **Literature Review**

### The Five Organizational Archetypes

Based on Organizational Theory field, specifically the works of Mintzberg's (1979; 1980; 1983) on organization design, firms will one way or another follow one of the five organizational archetypes except in transition periods from one type to another or in response to environmental turbulence when it will follow a hybrid structure. At first, Mintzberg pointed out five basic components: (1) the operating core which consists of the employees directly related to the making of the services or products, (2) strategic apex which includes the people who control the firm, (3) the middle line which consists of the managers who join the people in the strategic apex with those in the operating core, (4) technostructure which comprises of the analysts who analyze, plan, maintain or train the structure and the operating core, and (5) support staff which includes the specialists who provide indirect support to the firm for non-core activities. In proposing a typology of ideal types of organizational structures, Mintzberg employed as design parameters job specialization, behavior formalization, training and indoctrination, unit grouping,

unit size, action planning and performance control systems, liaison devices, vertical decentralization, and horizontal decentralization. Mintzberg also used five contingency factors—age, size, technical systems, environment, and power; and he identified five basic mechanisms of coordination— mutual adjustment, direct supervision, the standardization of work processes, outputs, and skills. Based on the identified parameters and factors, he recognized the five archetypes: *simple structure, machine bureaucracy, professional bureaucracy, divisionalized form*, and *adhocracy*. The archetypes are presented in Table 1.

	Simple Structure	Machine Bureaucracy	Professional bureaucracy	Divisionalized form	Adhocracy
Key means of coordination	Direct supervision	Standardization of work	Standardization of skills	Standardization of outputs	Mutual adjustment
Key part of organization	Strategic apex	Technostructure	Operating core	Middle line	Support staff (with operating core in operating adhocracy)
<u>Structural</u> <u>elements</u>					
Specialization of jobs	Little specialization	Much horizontal and vertical specialization	Much horizontal specialization	Some horizontal and vertical specialization (between divisions and headquarters)	Much horizontal specialization
Training and indoctrination	Little training and indoctrination	Little training and indoctrination	Much training and indoctrination	Some training and indoctrination (of division managers)	Much training
Formalization of behavior- bureaucratic/ organic	Little formalization - organic	Much formalization - bureaucratic	Little formalization- bureaucratic	Much formalization (within divisions)- bureaucratic	Little formalization- organic
Grouping	Usually functional	Usually functional	Functional and market	Market	Functional and market
Unit size	Wide	Wide at bottom, narrow elsewhere	Wide at bottom, narrow elsewhere	Wide at top	Narrow throughout
Planning and control systems	Little planning and control	Action planning	Little planning and control	Much performance control	Limited action planning (especially in administrative adhocracy)
Liaison devices	Few liaison devices	Few liaison devices	Liaison devices in administration	Few liaison devices	Many liaison devices throughout
Decentralization	Centralization	Limited horizontal decentralization	Horizontal and vertical decentralization	Limited vertical decentralization	Selective decentralization
<u>Contingency</u> <u>Factors</u>					
Age and size	Typically young and small	Typically old and large	Varies	Typically old and very large	Typically young (operating adhocracy)
Technical system	Simple, not regulating	Regulating but not automated, not very complex	Not regulating or complex	Divisible, otherwise like machine bureaucracy	Very complex, often automated (in administrative adhocracy), not regulating or complex (in operating adhocracy)
Environment	Simple and dynamic;	Simple and stable	Complex and stable	Relatively simple and stable: diversified markets (esp. products and services)	Complex and dynamic; sometimes disparate (in administrative adhocracy)
Power	Chief executive control; often owner managed; not fashionable	Technocratic and external control; not fashionable	Professional operator control; fashionable	Middle-line control; fashionable (esp. in industry)	Expert control; very fashionable

Table 1. Dimensions of the Five Archetypes (Source: Mintzberg, (1980))

The rationale to build our framework based on Mintzberg's five organizational archetypes is the following. First, referred to as a seminal work in the field of organizational theory (Robbins 1987), Mintzberg's work in 1979, "The Structuring of Organizations", has accumulated around 4500 citations, including 1250 citations since 2005, which confirms its continuing extensive presence and usage in literature (Lagrosen and Lagrosen 2003). Second, it condenses the insights of organizational theory in a concise and applied framework (Hofstede 1997). Third, the five archetypes' framework reveals effectiveness in relating the firm's environment and its organization structure (Johnson and Scholes 2002).

The link between the five organizational archetypes and the suggested environment characteristics in Mintzberg's framework is of great importance due to the implications of environment on alignment and its components (Chan and Reich 2007). In reviewing recent organization literature, we see that the arguments proposed in the framework are still valid. Highly dynamic environments favor less bureaucratic structure (Davis et al. 2009; Rowley et al. 2000). Mintzberg suggests that environment is highly dynamic for Simple Structure and Adhocracy archetypes, which are both organic in nature and have low formalization of behavior. On the other hands, less dynamic environments require more structure (Davis et al. 2009; Rivkin and Siggelkow 2003); Mintzberg proposes that environment is low in dynamism for Machine Bureaucracy, Professional Bureaucracy, and Divisionalised Form archetypes, which are bureaucratic in nature and have high formalization of behavior (except Professional Bureaucracy which has low formalization of behavior but has high complexity environment). The distinction between organic and bureaucratic structures is due to the difficulty in having both features together in one organization (Ford and Ford 1994; Lewis 2000).

### **Strategic Alignment Dimensions**

Building on the capability maturity model (CMM) developed by the Software Engineering Institute at Carnegie Mellon University, Luftman (2000) proposed a strategy alignment maturity (SAM) framework to measure IT-business alignment maturity on a five-level scale. The levels encompass six fundamental dimensions identifying the management practices, strategic choices, and organizational mechanisms that demonstrate IT-business alignment capabilities (Sledgianowski and Luftman 2005; Sledgianowski et al. 2006). As shown in Figure 1, the six recognized dimensions are communication, competency and value measurement, governance, partnership, scope and architecture, and skills. Communication depicts the level of ongoing knowledge dissemination in the firm. Competency and value measurement encompass the mechanisms and decisions used in evaluating IT's contribution to business such as the IT metrics or benchmarking employed. Governance refers to the processes and procedures used in prioritizing, allocating, and financing IT activities. Partnership comprises of the level of trust, risk, and reward sharing between IT and business partners. Scope and architecture pertain to the role allocated and executed by IT as an internal functional role or an external business driver role. Skills refer to the social environment and incentives geared towards innovation.

Prior research has examined IT-business alignment and proposed different constructs, models, and frameworks. In addition to the key and seminal works such as Baets (1992) and Henderson and Venkatraman (1992) which developed general models that depicted the high level IT-business alignment process model, later works focused on more specific antecedents or contingency factors such as firm size or environment uncertainty suggested by Raymond et al. (1995) or the twelve success factors proposed by Teo and Ang (1999) who derived their results after investigating eighteen critical success factors for aligning IS plans with business plans. However, we opted to use Luftman's (2000) framework because it is comprehensive yet parsimonious and at the same time independent of the parameters used in Mintzberg's five archetype framework, and thus helps to avoid collinearity in our proposed framework.

### **Proposed Framework**

Our proposed framework (Figure 2) suggests relevance of various dimensions that reflect/ensure ITbusiness alignment for each archetype. We are holding a premise of aligned firms to propose the different dimensions that capture the nature of the IT-business alignment in these firms. Those dimensions that have high relevance for IT-business alignment for the specific archetype are indicated as 'HIGH'.



Similarly, we are referring to the medium relevance and low relevance of the dimensions for the different archetypes by using 'MED' –medium- and 'LOW' respectively.

	Simple Structure	Machine Bureaucracy	Professional Bureaucracy	Divisionalized form	Adhocracy
Communication	LOW	MED	HIGH	HIGH	HIGH
Competency/ value measurements	LOW	HIGH	LOW	HIGH	LOW-Operating; HIGH -Admin.
Governance	MED	HIGH	LOW	MED	LOW
Partnership	HIGH	HIGH	MED	HIGH	MED
Scope & Architecture	MED	MED	MED	HIGH	LOW-Operating; HIGH -Admin.
Skills	HIGH	LOW	LOW	MED	HIGH

Figure 2. Proposed Framework for Relevance of IT-business Alignment Dimensions by Organizational Types

### Communication

We propose that the Communication dimension will have low association with the IT-business alignment configuration in a *simple structure* due to the reason that simple structure firms are grouped in an organic form, featuring few devices of liaison and power being located in the strategic apex; thus, communications parameters, such as liaison effectiveness and protocol non-rigidity, are easily attained allowing knowledge sharing to be achieved effortlessly due to the small size and low complexity environment. Therefore, this organically facilitated communication does not reflect alignment as much as it represents the nature of the organizational archetype. In a *machine bureaucracy*, we propose that the Communication dimension will have medium association with the IT-business alignment configuration due to two counteracting factors. First, knowledge sharing mechanisms are necessary in a large size firm which has a bureaucratic and functional grouping nature, and especially that power is focused in an external component, the technostructure, which should have a deep understanding of IT as well as

business to facilitate IT-business alignment. Yet, the second factor, which is the machine bureaucracy's nature of formalized behavior and communication imposing protocol rigidity, will limit the communication dimension realization and thus its relevance. Blau (1970) suggested that large organizations employ formal controls. Burn (1993; 1996) suggested that professional bureaucracies will focus on a bottom-up IS strategy approach to attain alignment. Therefore, we propose that the Communication dimension will have high association with IT-business alignment configuration in a professional bureaucracy due to the knowledge sharing mechanisms present in a highly decentralized firm which has a bureaucratic and functional/market grouping nature. Since power is focused in the professional operators' component, there is a need for this component to have a deep understanding of IT knowledge and in return the IT staff to have a good understanding of the business knowledge to facilitate IT-business alignment. We propose that the Communication dimension will have medium association with the IT-business alignment in a divisionalized form because knowledge sharing mechanisms are necessary in a very large size firm which has a bureaucratic and market grouping nature. Still, the divisions exhibit strict formalized behavior because they are primarily machine bureaucracies (1980) and thus impose protocol rigidity which will limit the communication dimension realization and thus its relevance. Yet, in distinction with machine bureaucracy, the headquarters in a divisionalized form makes use of appropriate communications mechanisms needed to maintain alignment and ensure knowledge sharing is achieved among the middle line, division managers who, in this case, have the power in the organization and the analytical skills needed to do this task. In an *adhocracy*, we propose that the Communication dimension will have high association with the IT-business alignment due to the fact that knowledge sharing and organizational learning mechanisms are organically supported by the nature of this archetype that dictates that different specialists are spread on multidisciplinary teams working on a particular project of innovation. In addition, there are other supportive factors such as the nonbureaucratic form which stresses informal decision processes and the many liaison devices.

### **Competency/Value Measurements**

We posit that Competency and value measurement in *simple structures* will have low association with the IT-business alignment configuration due to the low formalization of behavior and presence of few control systems; thus, the sub-dimensions such as IT and business metrics and formal assessments/reviews do not reflect the IT- business alignment level and have insignificant relevance. Blau (1970) suggested that large organizations employ formal controls. We posit that Competency and value measurement in machine bureaucracy will have high association with the IT-business alignment configuration due to the necessity of clear and formal value measurement tools in a large size organization and bureaucratic that depends on action planning; thus the sub-dimensions such as IT and business metrics, service level agreements, and formal assessments/reviews will enhance the IT- business alignment configuration while these sub dimensions are made possible due to the nature of the firm. We posit that Competency and value measurement in a professional bureaucracy will have low association with IT-business alignment due to the low formalization in behavior and complex environment in addition to the fact that few, if any, planning and control systems exist. Thus, the sub-dimensions such as IT and business metrics, service level agreements, and formal assessments/reviews will not be facilitated by the nature of the firm and will be challenging to achieve. In a *divisionalized form*, we posit that Competency and value measurement will have high association with the IT-business alignment due to the fact that this type of organization is controlled by performance and adherence to standards which impose specific measurement controls and formal assessments and reviews. Thus, the sub-dimensions such as IT and business metrics, service level agreements, and formal assessments/reviews will enhance the IT-business alignment while these sub dimensions are also made possible due to the nature of the firm. We posit that Competency and value measurement will have low association with the IT-business alignment for operating adhocracies due to the fact that they tend to use simple systems which help them solve the different and distinct problems for each client on short term project basis. In addition, the project team members share the same problems and goals so there is no need for different metrics for IT and business staff and there is not much relevance for service level agreements. As for administrative adhocracies, Competency and value measurement will have high association with IT-business alignment because the operating core, which is completely separated from both the strategic apex and the administrative core, is automated, established as a machine bureaucracy, or outsourced. Therefore, in these cases the strategic apex personnel are required to define the metrics and service level agreements and perform formal assessments/review in a sophisticated manner to ensure alignment with this truncated part that has an extensive technical side.

#### Governance

We propose that the Governance dimension in a *simple structure* will play a medium role in terms of ITbusiness alignment due to two counteracting factors. The first factor which increases the relevance of the dimension is the fact that simple structure is located in highly dynamic environment, thus prioritizing and allocating budgets to IT projects in an effective and efficient manner is featured in aligned firms. On the other hand, the second factor which plays down the relevance is the centralization of power in the strategic apex, causing the process of strategic planning to be less complex. Also, small organizations require only informal strategy-making processes (Powell 1992); taking into consideration that formalization of behavior is low and the organization is organic, governance mechanisms do not represent the alignment level of a firm. Burn (1994; 1996) found evidence to suggest that a machine bureaucracy focuses on top down IS strategies to achieve alignment. Also, Powell (1992) argued that large size firms need formal governance processes. Therefore, we posit that the Governance dimension in a machine bureaucracy will play a high role in terms of IT-business alignment. The first factor which increases the relevance of the dimension is the fact that machine bureaucracy is managed by action planning which has long-term irreversible performance outcomes; therefore, it is essential to have appropriate discussions and decision making processes for IT investments and plans. Second, these processes, strategic planning and prioritization processes, are also characteristics of the firm. Since, a bottom-up approach will not require rigid strategic planning mechanisms, we propose that the Governance dimension in a professional bureaucracy will play a low role in terms of IT-business alignment and also due to the nature of a professional bureaucracy, which does not have much planning and control systems to facilitate formal governance mechanisms. We propose that the Governance dimension in a *divisionalized form* will play a medium role in terms of IT-business alignment due to the relevance of this dimension because divisionalized form is managed by headquarters and because large size firms need formal governance processes (Powell 1992). Still, due to the autonomy given to the divisions and the diversified markets environment, imposing the governance dimensions is not completely attainable and therefore decreases the relevance of this dimension to realization of alignment. We posit that the Governance dimension in an adhocracy will play a low role in terms of IT-business alignment due to the low relevance of the governance sub dimension due to the nature of an adhocracy. Adhocracies use a strategy formation process and not a strategy formulation process (Mintzberg 1979). Therefore, strategies are implicitly formed by potentially all individuals taking piecemeal decisions depending on their current projects.

#### Partnership

Bengtsson et al. (2007) found that partnership with IT personnel is essential in small firms to have ongoing innovation. We posit that Partnership dimension in a *simple structure* will have high association with the IT-business alignment configuration due to the centralized and less formal nature of decision making and behavior in the firm. At the same time, working in a highly dynamic or hostile environment means that trust in IT contribution should be high in the strategic apex component in an ongoing manner, i.e. any compromise in the relationship with IT staff cannot be compensated in the organization by other factors. Across different firm types, Luftman and Kempliah's (2007) empirical results suggested that the CIO reporting structure, which relates to partnership, has strong association with alignment maturity. We propose that Partnership dimension in a *machine bureaucracy* will have high association with ITbusiness alignment configuration due to the locus of power in the technostructure which is an external component whereas IT staff will be in the support component; thus, significant level of trust should be maintained as well as a need for business sponsors in a large and functionally grouped firm whenever IT initiatives are being implemented. We posit that Partnership dimension in a professional bureaucracy will have medium association with the IT-business alignment due to the fact that despite the non- formal strategic planning role of IT and the suggested decentralized nature of the firm, professional operators are required to build rapport and trust with the IT professionals to achieve alignment. Relationship and trust between IT and business staff has been observed to have positive impact in large manufacturing firms' realized competitive advantage (Bhatt and Grover 2005). We posit that Partnership dimension in a divisionalized form will have high association with IT-business alignment due to the locus of power which is in the middle line component whereas as IT staff will be in the support component. Thus, significant level of trust should be maintained; also, there is a need for business sponsors/champions in very large firms whenever IT initiatives are being implemented. We propose that Partnership dimension in an adhocracy will have medium association with the IT-business alignment configuration due to the fact that trust and rapport are fundamentals for the smooth functioning of the adhocracies which rely on very informal and organic multidisciplinary teams. Still, IT cannot be distinguished in a distinct program management or special role, and there is no major role for a business sponsor/champion.

### Scope and Architecture

We propose that the Scope and architecture dimension in a simple structure will have medium association with the IT-business alignment configuration due to the fact that although high dynamism would necessitate making IT as a driving force in a firm, the small size of the firm does not allow significant resources for an ongoing creation or management of emerging technologies and does not encompass the other sub dimensions such as standards articulation and enterprise architectural integration. In a *machine bureaucracy*, we posit that the Scope and architecture dimension will play a medium role in terms of IT-business alignment due to two opposing factors. The first factor, which increases the relevance of the dimension, is the fact that machine bureaucracy is a large size organization which requires standardization and enterprise architectural integration. The second factor that plays down the significance is the generally stable-oriented environment that will inhibit the enabler/driver role of IT and the non frequent occurrence of emerging technologies in such an environment. We propose that the Scope and architecture dimension in a *professional bureaucracy* will play a medium role in terms of IT-business alignment due the fact that professional bureaucracy is a usually not a large size organization and, thus, does not require such standardization or feature any enterprise architectural integration. A second factor that plays down the significance is the generally low dynamic environment that will inhibit the enabler/driver role of IT and the non frequent occurrence of emerging technologies especially in a complex environment. In a divisionalized form, we posit that the Scope and architecture dimension will play a large role in terms of IT-business alignment due to its relevance because a divisionalized form, as noted, is a large size organization which requires standards articulation, enterprise- and, inter-enterprise architectural integration. Although the generally low dynamic environment will inhibit the enabler/driver role of IT, the diversified markets serviced will trigger challenges motivating a driving role to the IT, as well as promoting customization to the diverse customers' needs. We propose that the Scope and architecture dimension will play a low role in terms of IT-business alignment for operating adhocracies due to absence of a need for the enterprise architectural integration or standards articulation; technology is used as a tool by the multidisciplinary teams and not used as a driver for the business. As for administrative adhocracies, the Scope and architecture dimension will play a high role in the alignment due to the need to manage emerging technologies and the needed architectural integration especially in the generally high dynamic environment which requires innovation from the administrative component.

#### Skills

Bengtsson et al. (2007) suggested that entrepreneurship is necessary for the successful integration of marketing and IT processes. We posit that Skills dimension in a simple structure will have high association with the IT-business alignment configuration due the vital nature of the entrepreneurship/ innovation factor in the case of small, young age organizations; change readiness is significantly necessary to allow IT to play a role, and the social/interpersonal environment is indispensable to motivate any ITbusiness alignment. We propose that Skills dimension in a machine bureaucracu will have low association with IT-business alignment configuration due to the nature of environment the firm faces which inhibits the entrepreneurship/innovation factor. Also, the highly formalized bureaucratic behavior limits the non-traditional sub dimensions such as career crossover training. We posit that Skills dimension in a professional bureaucracy will have low association with IT-business alignment due to the nature of firm's environment which limits the non-traditional sub dimensions such as career crossover training in addition to the non-entrepreneurial priority in general. In a *divisionalized form*, we posit that Skills dimension will have medium association with IT-business alignment configuration due to the firm's environment which is generally low in dynamism and thus does not encourage the entrepreneurship/ innovation and the highly formalized bureaucratic behavior within the divisions; still, the headquarters has the ability to enforce sub dimensions such as innovation and change readiness and promote a trusting interpersonal environment within the senior business and IT staff within the organization. We propose that Skills dimension in an *adhocracy* will have high association with the alignment due to the nature of adhocracy's environment which promotes the entrepreneurship factor. Also, the highly informal organic form stresses social and interpersonal environment, change readiness, and natural cross training.

# **Research Methodology**

The research methodology chosen for this study comprises of two steps. The first step is a qualitative study consisting of a multiple case study approach (Eisenhardt 1989) of firms purposively sampled to represent the five organizational archetypes. Case study approach is widely used by qualitative researchers in IS research (Orlikowski and Baroudi 1991). The second step would be a quantitative study consisting of a survey of a large number of firms. The rationale behind this choice is that this is a real context phenomenon that needs much exploration, and as researchers since we don't have control over all the variables adopting a quantitative approach will hardly capture the phenomenon under study although it can lead to better generalizability. Therefore, a quantitative survey would be used after a qualitative study that deeply explores the influencing factors that were laid down. Also, the multiple cases will allow inferring the differences between several cases of diverse organizations that have been able to implement IT-business alignment and therefore the nature of alignment as a function of organizational type will be easier to depict and evaluate. The analysis of the results of the qualitative study will influence the development of the quantitative survey. To form a pool of five to six firms in each archetype category, we will collect externally provided data on firms such as annual reports depicting the organizational structures showing the operational and organizational behavior. In order to identify the five organizational archetypes in a pool of target firms, Lagrosen and Lagrosen (2003) sent descriptions of each archetype for the respondents to select the one that best represents their firm. This self-report questionnaire item will be sent to the firms to confirm our prior selection of the firms, which is derived from the externally provided data. Since most of the alignment instruments suggested by alignment literature include or relate to dimensions or sub-dimensions in the Strategic Alignment Maturity model we are using in our framework, we opt to employ a mathematical model in order to add validity to our analysis. We will use the Alignment Index (Day 1996) that is based on the interviewee's allocation of a percentage value based on a subjective evaluation of how much aligned the IS activity is with the predefined business objective of this activity. Interviews would include multiple participants at different levels, i.e. senior business executives and senior IT executives as well as low to middle profile business staff and IT staff; this will ensure capture of richer and more accurate data. Semi-structured interviews would be used to ensure that there are no biases imposed by the researcher, and open-ended questions would be utilized to enable the emergence of any factors and insights. The interviews would be transcribed, coded, and categorized by 2 interpreters to avoid personal biases. A comparison with our framework would be done; any new insights that emerge would be followed by literature review, and more cases studied until no more insights gained (Glaser and Strauss 1967).

# **Potential implications**

Understanding the nature of alignment as a function of organizational type is essential for theoretical as well as practical goals. Theoretically, it can enrich the IT-business strategy alignment literature by tackling a previously unexplored area of importance and may answer many of the questions raised over the effectiveness of the IT-business alignment literature. Specifically, in response to the calls of new stream of research to tackle IT-business alignment, this study examines IT-business alignment as a function of the five organizational archetypes. Therefore, this study seeks to produce results that might clarify the inconsistencies in the literature of IT-business alignment. For practitioners, this research can help managers to recognize and target specific strategies to enhance their IT-business alignment by focusing on the dimensions relevant to their archetype and tailor strategies to keep in line with their objective to be successful in their alignment. Also, the managers can use the framework to leverage their organizations' overall performance by reducing the degree of deviation from the proposed framework.

# Conclusion

In proposing the integrative framework on the IT-business alignment as a function of the five organizational archetypes, we are attempting to tackle alignment research and initiate further research at a more granular level arguing that alignment should not be studied as a unified strategy, process, or measurement. Instead, alignment research should take into consideration the sizeable differences among the five archetypes, and should examine alignment in a tailored manner handling each type differently.

# References

- Baets, W. 1992. "Aligning Information Systems with Business Strategy," *Journal of Strategic Information Systems* (1:4), pp. 205–213.
- Bengtsson, M., Boter, H., and Vladimir, V. 2007. "Integrating the Internet and Marketing Operations," *International Small Business Journal* (25:1), pp. 27-48.
- Bhatt, G.D. and Grover, V. 2005. "Types of Information Technology Capabilities and Their Role in Competitive Advantage: An Empirical Study," *Journal of Management Information Systems* (22. 2), pp. 253-277.
- Blau, P. 1970. "A Formal Theory of Differentiation in Organizations," *American Sociological Review* (35:2), pp. 201-218.
- Burn, J.M. 1993. "Information Systems Strategies and the Management of Organizational Change A strategic alignment model," *Journal of Information Technology* (8:4), pp. 205-216.
- Burn, J.M. 1996. "IS Innovation and Organizational Alignment A professional juggling act," *Journal of Information Technology* (11:1), pp. 3-12.
- Chan, Y., and Reich, B. 2007. "IT Alignment: What Have We Learned?" Journal of Information Technology (22:4), pp. 297-315.
- Ciborra, C.U. 1997. "De Profundis? Deconstructing the Concept of Strategic Alignment," *Scandinavian Journal of Information Systems* (9:1), pp. 57-82.
- Davis, J. P., Eisenhardt, K. M., and Bingham, C. B. 2009. "Optimal Structure, Market Dynamism, and the Strategy of Simple Rules," *Administrative Science Quarterly* (54:3), pp. 413–452.
- Day, J.G. 1996. "An Executive's Guide to Measuring I/S," *Strategy & Leadership* (24:5), pp. 39-41.
- Eisenhardt, K. M. 1989. "Building Theories from Case Study Research," *The Academy of Management Review* (14:4), pp. 532-550.
- Ford, J. D., and Ford, L. W. 1994. "Logics of Identity, Contradiction, and Attraction in Change." *Academy* of Management Review (19:4), pp. 756-795.
- Galliers, R., and Newell, S. 2003. "Strategy as Data C Sense Making," in *Images of Strategy* S. Cummings, D. Wilson (eds.), Oxford: Blackwell, pp. 164–196.
- Glaser, B., and Strauss, A. 1967. *The Discovery of Grounded Theory, Strategies of Qualitative Research*, London: Wiedenfeld and Nicholson.
- Henderson, J.C., and Venkatraman, N. 1992. Strategic Alignment: A model for organizational transformation through information technology, in *Transforming organizations*, T.A. Kocham and M. Useem (eds.), New York: Oxford University Press, pp. 97–117.
- Hofstede, G. 1997. Cultures and Organisations, Software of the Mind, New York, NY: McGraw-Hill.
- Johnson, G., and Scholes, K. 2002. *Exploring Corporate Strategy*, 6th ed., Harlow: Pearson Education Ltd.
- Labovitz, G., and Rosansky, V. 1997. The Power of Alignment, New York, NY: John Wiley & Sons.
- Lagrosen S., and Lagrosen Y. 2003. "Quality Configurations: a Contingency Approach to Quality Management," *International Journal of Quality & Reliability Management* (20:7), pp. 759-773.
- Lewis, M. W. 2000. "Exploring paradox: Toward a More Comprehensive Guide," Academy of Management Review (25:4), pp. 760-777.
- Luftman, J. N. 2000. "Assessing Business-IT Alignment Maturity," *Communications of the Association of Information Systems* (4:14), pp. 1-50.
- Luftman, J., and Kempaiah, R. 2007. "An Update on Business-IT Alignment: A Line" Has Been Drawn," *MIS Quarterly Executive* (6:2), pp. 165-177.
- Luftman, J., Kempaiah, R. and Nash, E. 2006. "Key Issues for IT Executives 2005," *MIS Quarterly Executive* (5:2), pp. 81-101.
- Mintzberg, H. 1979. The Structuring of Organization, Englewood Cliffs, NJ: Prentice-Hall.
- Mintzberg, H. 1980. "Structure in 5's A Synthesis of the Research on Organizational Design." *Management Science* (26:3), pp. 322-341.

Mintzberg, H. 1983. Structure in Fives: Designing Effective Organizations, New York: Prentice-Hall.

- Orlikowski, W.J. and Baroudi, J.J. 1991."Studying Information Technology in Organizations: Research Approaches and Assumptions," *Information Systems Research* (2:1), pp. 1-28.
- Palmer, J.W. and Markus, M.L. 2000. "The Performance Impacts of Quick Response and Strategic Alignment in Specialty Retailing," *Information Systems Research* (11:3), pp. 241-259.
- Pearlman, E. 2004. "Welcome to the Crossroads, CIO Insight," 1(45): Available Internet: http://www.cioinsight.com/article2/0,1540,1682969,00.asp (05/22/07).
- Powell, T.C. 1992. "Organizational Alignment as Competitive Advantage," *Strategic Management Journal* (13:2), pp. 119-134.
- Raymond, L., Pare, G. and Bergeron, F. 1995. "Matching Information Technology and Organizational Structure: An Empirical Study with Implications for Performance," *European Journal of Information Systems* (4:1), pp. 3-16.
- Reich, B.H., and Benbasat, I. 1996. "Measuring the Linkage between Business and Information Technology Objectives," *MIS Quarterly* (20:1), pp. 55-81.
- Rivkin, J. W., and Siggelkow N. 2003 "Balancing search and stability: Interdependencies among Elements of Organizational Design," *Management Science* (49:3), pp. 290–311.
- Robbins, S. P. 1987. Organization Theory, Structure, Design and Applications. Englewood Cliffs, NJ: Prentice-Hall.
- Rowley, T. J., Behrens D., and Krackhardt D. 2000 "Redundant Governance Structures: An Analysis of Structural and Relational Embeddedness in the Steel and Semiconductor Industries." *Strategic Management Journal* (21:3), pp. 369–386.
- Sauer, C. and Yetton, P.W. 1997. "The Right Stuff An Introduction to New Thinking about Management," in *Steps to the Future: Fresh thinking on the management of IT-based organizational transformation*, C. Sauer and P.W. Yetton (eds.), San Francisco, CA: Jossey-Bass, pp. 1-21.
- Shams, R.M., and Wheeler, F.P. 2003. "Information-Induced Strategic Alignment: Towards a Semiological Analysis," in *Creating Business Value with Information Technology: Challenges and solutions,* N. Shin (ed.), Hershey, PA: Idea Group Publishing, pp. 23-49.
- Sledgianowski, D., and Luftman, J. 2005. "IT-Business Strategic Alignment Maturity: A Case Study," *Journal of Cases on Information Technology* (7:2), pp. 102-120.
- Sledgianowski, D., Luftman, J. and Reilly R. 2006 "Development and Validation of an Instrument to Measure Maturity of IT Business Strategic Alignment Mechanisms," *Information Resources Management Journal* (19:3), pp. 18-33.
- Teo, T.S.H., and Ang, J.S.K. 1999." Critical Success Factors in the Alignment of IS Plans with Business Plans," *International Journal of Information Management* (19:1), pp. 173-185.