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GETTING READY FOR SUCCESS: MAY ALIGNMENT BE OF HELP?

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Abstract

What is the role of organizational readiness and IT business alignment in the adoption process of an IT-supported interorganizational linkage (IOL)? In this paper, we claim that achieving a proper level of organizational readiness is crucial for the successful adoption of IOL. We thus focus on intra-organizational factors that potentially impact the effectiveness of preparatory activities towards getting ready for the adoption and implementation of an IOL. By drawing upon results from alignment and adoption of innovations literatures, we develop and theoretically underpin a model that illustrates the moderating impact of IT business alignment on the initiation and implementation stages of the IOL adoption process.

Keywords

Interorganizational linkages, interorganizational systems, organizational readiness, IT business alignment; organizational innovation adoption

Introduction

Although IT-supported cooperation among firms is a phenomenon which has emerged many years ago and currently is a wide-spread practice in many industries, we can still find many examples of cooperative relationships (like sourcing relationships, for example) which fail to deliver the expected benefits (Aubert and Patry 1998; Goles and Chin 2005). Many reasons for this may occur, some of them being grounded within the own organization. This shows that careful preparations such as the adaptation of firm-internal business processes – including the underlying IT – are necessary in order for firms to be able to reap the benefits from interorganizational cooperation. There is indication from literature that a proper level of organizational readiness is important for the achievement of positive outcomes from IT-based cooperation (Iacovou et al. 1995). Nevertheless, the question what (intra-)organizational factors are of particular importance when adopting a new interorganizational linkage (IOL), has received surprisingly little attention from academics. The correct assessment of the own organizational readiness and the effective execution of preparative activities towards the achievement of a sufficient

level of organizational readiness are difficult tasks to be carried out because they require the tight and well-coordinated collaboration of individuals from different departments as well as different organizations.

In this paper, we focus on the intra-organizational collaboration of IT and business departments (so-called IT business alignment – ITBA) within an IOL-adopting organization. We refer to an IOL as interorganizational cooperation by means of interorganizational systems (IOS) (Teo et al. 2003).

Alignment between IT and business domain in organizations has been discussed to substantially contribute to the generation of competitive advantage by means of knowledge sharing and integration (Kearns and Lederer 2003; Reich and Benbasat 2000). In order to be successful, the establishment of an IOL requires the involvement of both organizational layers: the business unit as well as the IT unit, which have to collaborate in a tight and aligned way during the IOL evaluation and implementation process.

There are different knowledge pools within the firm (i.e. business side and IT domain) (Reich and Benbasat 2000) which have to be incorporated into the process of evaluating the potential of an IOL and further to enable its successful adoption. Through its underlying routines, alignment represents a continuous process of knowledge sharing and creation, where individual knowledge is transformed into organizational know-how and behavior. We claim that in situations where the organization adopts an innovation which affects both, the business as well as the IT domain, good IT business alignment may contribute to IOL adoption success. Our main propositions are (1) that high organizational readiness is crucial for the successful implementation of an IOL and (2) that IT business alignment positively affects a firm's capability to identify opportunities for IOL and to reap the benefits from IOL by enabling it to effectively adapt its organizational structure and IT to meet the demands of the new cooperation. The more intense the interplay between business and IT domain within an organization (i.e. the higher the level of ITBA in terms of formal and informal routines), the more capable will an organization be to correctly evaluate the fit between a prospective IOL and the firm's goals, structure, and financial and technological possibilities (i.e. its organizational readiness to adopt IOL) and, subsequently, the more effective it will implement the necessary changes on structural and IT level in order to become ready for the specific IOL.

Therefore, the research questions guiding the development of this paper are:

What is the impact of organizational readiness on the intention to adopt and the eventual success of an IOL?

How does intra-organizational IT business alignment affect a firm's IOL adoption process?

For this purpose, we develop and theoretically underpin a model that captures the relationships between organizational readiness, IOL adoption intention, IOL success, and IT business alignment, mapping them on the different stages of a generic innovation adoption process.

Answers to these questions will contribute to the existing body of knowledge by allowing us to gain deeper insights into organizational factors which act as drivers for successful adoption and implementation of IOL. This paper represents, to our knowledge, the first attempt to contribute to the organizational adoption of innovations literature by applying insights from another IS research domain, namely the IT business alignment research strand.

Literature Review

Adoption of Innovations

The adoption of IT-based IOL has often been discussed from an adoption and diffusion of innovations perspective (e.g., Khalifa and Davison 2006; Saunders and Clark 1992; e.g., Teo et al. 2003). Under the “dominant paradigm” (Fichman 2004), authors are mainly interested in identifying factors that either inhibit or facilitate the adoption of innovations like IT-based IOL. For example, Teo et al. (2003) found isomorphic pressures (mimetic, coercive, and normative) to positively influence IOL adoption intention. Khalifa and Davison (2006) distinguished between internal and external pressures and further found perceived feasibility and perceived desirability of IOL to significantly influence managerial IOL adoption intention. Organizational readiness (in terms of financial and human resources, processes, IT sophistication, etc.) has also been found to significantly influence the adoption of IT-based IOL (Chwelos et al. 2001; Iacovou et al. 1995). Furthermore, readiness of the trading partner has been found to be an enabler for the adoption of IOS (Chang and Chen 2005; Chwelos et al. 2001).

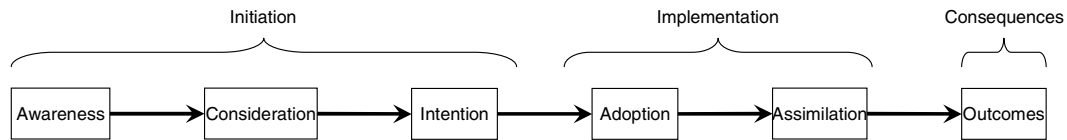


Figure 1: Innovation process (based on Frambach and Schillewaert 2002; Gallivan 2001)

The organizational innovation process has been discussed to be a sequence of different stages and substages (as depicted by Figure 1). “In the initiation stage, the organization becomes aware of the innovation, forms an attitude towards it, and evaluates the new product; it encompasses awareness, consideration, and intention substages. In the implementation stage, the organization decides to purchase and make use of the innovation. [...] the acceptance or assimilation within the organization now becomes important” (Frambach and Schillewaert 2002, p. 164). After the implementation stage, organizational consequences may be observed (Gallivan 2001). The pre-adoption stages (awareness, consideration and intention) as well as the outcomes of adoption have repeatedly been claimed to be under-researched (Fichman 2004; Frambach and Schillewaert 2002; Jeyaraj et al. 2006). We contribute to closing this gap by analyzing how IT business alignment impacts the initiation stage as well as the consequences of IOL adoption.

IT Business Alignment

Alignment was found to be an important factor for generating business value from the deployment of information systems (Chan et al. 1997; Papp 1999; Teo and King 1996). Based on the Strategic Alignment Model (Henderson and Venkatraman 1993), research has focused primarily on antecedents or enablers and inhibitors of alignment (Luftman et al. 1999). According to Reich and Benbasat (1996), ITBA is “the degree to which the information technology mission, objectives, and plans support and are supported by the business mission, objectives and plans”. Their model of alignment consists of an intellectual and a social dimension. The intellectual dimension is a refinement of content linkage as defined by Lederer and Mendelow (1989), differentiating between internal consistency (IT mission is internally consistent with business mission) and external validity (plans are comprehensive and valid with respect to external business and IT environment). In contrast, the social dimension describes “the level of mutual understanding of and commitment to the business and IT mission, objectives and plans”. The social dimension of alignment is driven by cross-domain knowledge between business and IT executives, IT implementation success, effective communication between business and IT executives, and connections between business and IT planning processes (Reich and Benbasat 2000). Tiwana et al. (2003) add a cognitive dimension which covers psychological relationship issues such as trust, mutual understanding, and commitment.

The different alignment facets distinguish between alignment as an outcome and alignment as a process which affects the outcome dimensions (Sabherwal and Chan 2001). The most prominent argument for the latter stems from Kearns and Lederer (2003, p. 5) who state that alignment is a “process in which managers participate in the exchange of knowledge”. Thus, alignment describes effective communication and knowledge exchange patterns (routines) which affect the outcome dimensions of shared knowledge and mutual understanding and lead to the fit of business and IT strategies and plans (Bergeron et al. 2004). Several authors link alignment to the resource-based view and describe it as a dynamic capability to develop and implement congruent IT and business plans (e.g., Sambamurthy and Zmud 1999; e.g., Wagner and Weitzel 2005). The alignment process itself is based on the concept of routines which describe the formal and informal purposeful interaction of entities within an organization (Amit and Schoemaker 1993). “Smoothly functioning routines between IT and business units are seen as valuable leading to a more effective development and use of IT” (Wagner and Weitzel 2005, p. 4).

Prior research has identified two primary consequences of alignment: increased IS effectiveness (Chan et al. 1997) and increased firm performance (Sabherwal and Chan 2001). In contrast, misalignment of business and IT has been found to lead to undesirable organizational effects like poor utilization of scarce organizational resources, sub-optimal performance of business units and the organization, a cyclical relationship between higher IS spending and expectations for success, costly IS investments with low yield returns, missed identification of high potential IS applications, and lack of capitalization of first-rate technology-related ideas (Chan 2002; Lederer and Mendelow 1987).

Model Development

Figure 2 depicts our research model. We will discuss the constructs and the way they interrelate in the following sections.

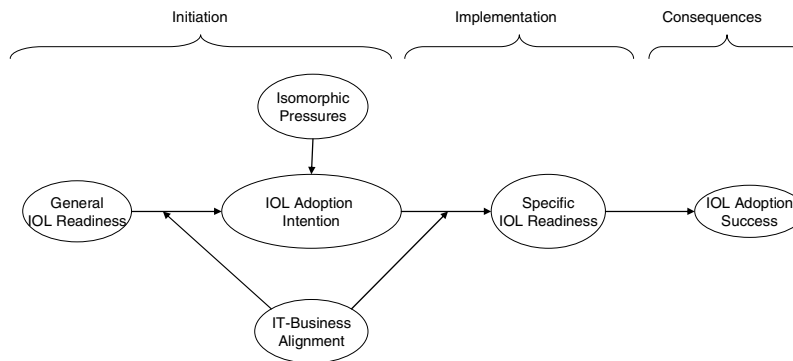


Figure 2: Research Model

IOL Adoption Intention

IOL adoption intention refers to the organizational decision to enter an IT-based, interorganizational cooperation. Although it is ultimately individuals who will trigger it, organizational intention is formed as a consensus of the key decision-makers towards performing the behavior in question, i.e., IOL adoption. Adoption intention has been the dependent variable in some recent studies (Khalifa and Davison 2006; Plouffe et al. 2001; Teo et al. 2003) and has usually been measured by capturing managerial perceptions.

Isomorphic Pressures

Isomorphic pressures refer to external and/or internal coercive, mimetic and normative pressures experienced by the organization. Institutional theory (DiMaggio and Powell 1983; Meyer and Rowan 1977; Scott 2001; Teo et al. 2003) provides a powerful lens to examine how organizations sense threats and react to them. It views organizational design not as a rational process but the result of organizational reactions to external and/or internal pressures that prompt organizations in an organizational field to resemble one another over time. This isomorphic behavior is considered a key factor affecting an organization's intention to adopt an IOL.

IOL Readiness

IOL readiness reflects the structural and technical capability of a firm to adopt IOL. Similar conceptualizations have been used by many researchers. For example, (Iacovou et al. 1995) use organizational readiness in their model of EDI adoption as "the level of financial and technological resources of the firm". Within their TOE framework, Kuan and Chau (2001) refer to readiness as perceived organizational resources.

Our concept of IOL readiness consists of two dimensions or layers: a business and an IT dimension:

- The business dimension, termed *IOR (interorganizational relationship) readiness*, reflects the structural preparedness of the firm to adopt an IOL. It implies the adaptation of processes to meet the needs of the IOR, the redistribution of authority and responsibilities, etc.

- The IT dimension, termed *IOS (interorganizational systems) readiness*, reflects the technological preparedness of the firm in terms of IT sophistication and know how to either adopt new, or adapt an existing IOS in order to technologically support the IOR.

In our model, we further differentiate between *general* IOL readiness, which refers to the general state of preparedness of the organization to adopt *any* IOL and *specific* IOL readiness which refers to the specific IOL relationship for which we are measuring adoption intention and adoption success. Along the innovation process, general IOL readiness refers to the state of readiness within the initiation stage, at the time when the firm becomes aware of the opportunity or necessity to enter an IOL. This general IOL readiness may be, as we will discuss later, an enabler of IOL adoption intention. In contrast, specific IOL readiness is the state of preparedness *after* the firm has taken the decision to adopt IOL and has conducted preparatory actions for the specific IOL.

IT Business Alignment

In this paper, we draw on both the intellectual dimension and social dimension of alignment (Reich and Benbasat 1996) as well as on their interrelations. Since the *intellectual dimension* reflects the match of IT and business strategies, concepts, and plans, it represents the common organizational frame or environment that forms the foundation for innovation adoption processes.

The *social dimension* of ITBA – as introduced above – is a complex construct which consists of various dimensions. Beimborn et al. (2006a; 2006b) developed an operational alignment construct consisting of the dimensions of *shared knowledge, communication, and cognitive relationship* for exploring the impact of operational alignment on effective usage of usage and, subsequently, on process performance. Since *this* research work focuses on the adoption of IOL, we further add the remaining dimensions from Reich and Benbasat (2000) which are *connections* between business and IT planning processes and *IT implementation success*. Figure 3 clarifies the construct layout.

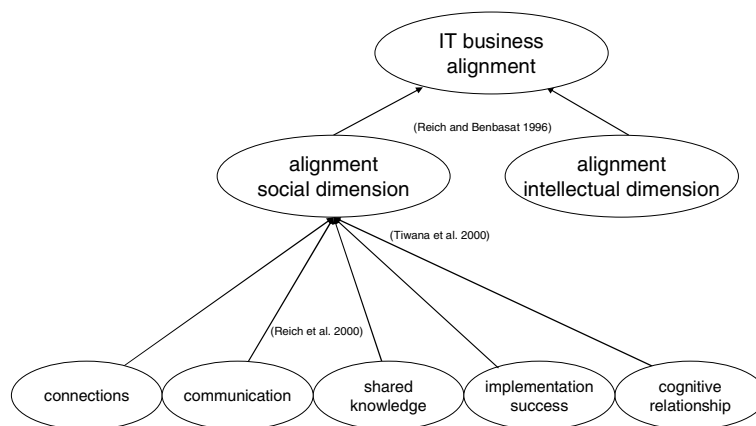


Figure 3: IT business alignment construct

A major advantage of the explicit consideration of different dimensions and sub-dimensions of such a pivotal construct is that it allows for measuring the singular impact of each particular dimension on the different steps of the innovation adoption process.

Connections measures the relation between IT and business planning processes (Reich and Benbasat 2000). Lederer and Burky (1989) and Zmud (1988) found evidence that tight interconnections between IT and business units during the introduction of new technologies (e.g. by implementing technology transfer groups and joint steering committees (Reich and Benbasat 2000)) are critical for successful implementation of IT.

The second part of the social dimension – *communication* – refers to the kind and quality of interaction patterns and communication channels between IT and business unit in the daily business. What are the formal and informal relations between the people of the different organizational units? How effectively are different communication channels being used?

The *shared knowledge* dimension represents the ability to understand the opposite (business or IT) domain (Nelson and Coopride 1996). Business employees' knowledge positively affects the relationship (Broadbent and Weill 1993) as well as business-related knowledge of IT managers does (Sambamurthy and Zmud 1997). The latter is sometimes categorized as part of the IT's absorptive capacity in the literature (Boynton et al. 1994). Do IT employees have an understanding for the business structure and processes which are provided by them? Do they have an understanding for the specific problems of the business domain which have to be solved by joint initiatives?

Success of IT projects represents a further facet of the social dimension (Reich and Benbasat 2000) and can also be seen as an enabler for the *cognitive relationship*. Concepts like trust, mutual respect, mutual acceptance, and mutual understanding of common goals form the critical foundation of a good relationship between IT and business people (Galunic and Rodan 1998; Nelson and Coopride 1996; Tiwana et al. 2003).

Obviously, the different dimensions of alignment are interdependent and affect each other. For example, the cognitive relationship can be seen both as a driver as well as an outcome of all remaining social dimension facets (Hansen 1999; Tiwana et al. 2003).

The *intellectual dimension* can be measured as a single item measure, as applied in recent studies (Beimborn et al. 2006b; Tallon et al. 2000b). In contrast, the social dimension with its five sub-dimensions is considered as a second-order construct with the sub-dimensions being latent variables as well. Indicators can be adopted from (Bassellier and Benbasat 2004; Bhatt 2003; Broadbent and Weill 1993; Chung et al. 2003; Luftman 2000; Reich and Benbasat 1996; Teo and King 1996).

IOL Adoption Success

IOL adoption success measures the result of the adoption process. It represents the organization's realized benefits from adopting the IOL. Adoption success can be conceptualized as the difference between the expected benefits (before adoption) and the realized benefits (after adoption) of IOL. IOL success can be measured by collecting both perceptual measures from the managers in charge with the business process (assuming that these managers are sufficiently informed about the constructs in question (Wagner 2006)) as well as objective measures (Venkatraman and Ramanujam 1987). Perceptual measures are a widely accepted mode of operationalization of constructs in IS research, because there is evidence that these measures strongly correlate with objective measures (Powell and Dent-Micallef 1997; Tallon et al. 2000a).

Propositions

Organizational readiness has been previously shown to be a driver of IOL adoption intention (Chwelos et al. 2001; Iacovou et al. 1995). Conceptually, IOL adoption intention may be the result of either one of the two following triggering events, or a combination of both. First, the organization may identify opportunities for change which could help the organization to achieve its efficiency goals (Khalifa and Davison 2006). Therefore, after becoming aware of the opportunity and evaluating it, the firm may decide to adopt the IOL. Second, intention to adopt IOL may arise as response to isomorphic pressures (Teo et al. 2003). While the first situation can be seen as a reaction to opportunities, the second represents a reaction to threats: "in highly competitive markets, innovation adoption may be necessary to maintain one's market position. Non-adoption of an innovation [...] in such an environment may result in competitive disadvantage" (Frambach and Schillewaert 2002, p. 167).

Similar indications for the antecedents of intention can be found in prior literature. For example, referring to the initiation stage of the innovation process, Cooper & Zmud (1990, p. 124) state that change may evolve "from either organizational need (pull), technological innovation (push) or both". Teo et al. (2003) found isomorphic pressures (coercive, mimetic, and normative) to have a significant impact on IOL adoption intention. Also, Khalifa & Davison (2006, p. 277) note that "while isomorphic pressures are undeniably relevant to the organizational adoption decision [...], organizations also adopt IT when they anticipate significant benefits, e.g., efficiency gains, and are positive about their readiness, e.g., financial, technological, and organizational feasibility". Kuan and Chau (2001, p. 511) state: "if the perceived benefits cannot be achieved due to lack of resources, adoption is meaningless to the company regardless of how great the benefits are". Therefore, we formulate:

- P1** Higher levels of IOL readiness lead to higher IOL adoption intention.
- P2** Higher levels of isomorphic pressures lead to higher IOL adoption intention.

After deciding to adopt a specific IOL, the organization needs to make the necessary preparations for its implementation. Both, business and IT domain are affected by this, with the degree of change depending on their prior state of preparedness. Kantor (1994) noted that IOR alter "internal roles, relationships, and power dynamics for the organizations entering into them". Indeed, on a structural level, to be capable to meet the specific demands and reap the benefits from the new cooperation, the firm needs to redistribute responsibilities and rearrange existing, or instantiate new, routines for dealing with the new external and the changed internal arrangements (Loh and Venkatraman 1992). At a technical level, the firm needs to adapt the existing infrastructure and possibly adopt new IOS to ensure smooth data exchange with the IOL partner by adapting existing, or adopting new, IOS. Therefore, we claim that

P3 IOL adoption intention is a direct driver of IOL readiness.

Focusing dedicatedly on our research questions, we now incorporate the IT business alignment construct into our model. Basically, we propose that this intra-organizational relation between IT and business units has an important impact on the IOL adoption process (IOR and IOS), since both parties are highly involved. In the literature, there are several indications in literature that IT business alignment may have an impact on the organizational adoption of innovations. For example, Henderson and Sifonis (1988) claimed that strategic ITBA facilitates more *rational* investments in IT and reduces improvident spending. Daft (1978) argues that organizations have dual cores – administrative and technical – and that organizations vary in the relative innovativeness and degree of coupling between these cores. He claims that there are some characteristics which act as facilitators for organizational adoption of innovations – among them the “involvement in professional organizations and a high intensity of communication within organization groups” (Daft 1978, p. 207). Further, he states that “administrative innovations often affect the technical core. Hence, this type of innovation activity will be most successful when the technical core is tightly coupled to the administrative core” (Daft 1978, p. 208).

ITBA has been shown to positively influence IT flexibility, which in turn drives organizational flexibility (Wagner and Weitzel 2006). Organizational flexibility (Evans 1991) is a dynamic capability which enables firms to (proactively) screen their environment for innovation opportunities, evaluate the fit between the innovation and the company’s goals, resources, and processes and, after deciding to adopt, to (reactively) rearrange their processes and resources in order to effectively reap the benefits from the innovation adoption. There is a striking resemblance between this concept and Kessler’s (2004, p. 283) definition of the innovation process as “the product of both more proactive, design decisions that enable innovation and more reactive, behavioral decisions that execute innovation”.

Moreover, (Beimborn et al. 2006b) have shown that IT flexibility can be enhanced by IT business alignment by means of increasing business knowledge availability to the IT domain as a result of knowledge sharing and dissemination. The basis for these effects is the structural linkage provided by frequent interaction between the IT and the business domain which facilitates knowledge sharing and mutual understanding. We thus hypothesize that by enhancing organizational flexibility

P4 ITBA positively moderates the effect of general IOL readiness on IOL adoption intention.

P5 ITBA positively moderates the effect of IOL adoption intention on specific IOL readiness.

To our knowledge, the relationship between readiness and adoption success has not been the object of explicit scholar attention so far. (As a matter of fact, there are very few articles focusing on organizational outcomes or benefits of innovation at all (Fichman 2004; Jeyaraj et al. 2006)). However, several implicit comments on this topic can be found in literature. For example, Klein and Sorra (1996) claim that the implementation effectiveness depends on the skills of employees and on the “absence of obstacles” within the organization which can be interpreted as organizational readiness. Furthermore, the compatibility of the innovation with the organization has emerged in prior literature as a critical variable for the successful adoption of an innovation (Ramamurthy 1994). Of course, a flexible organization may foster compatibility and thus increase chances for successful adoption by adapting its processes and (IT) infrastructure, i.e., creating organizational readiness for the innovation. Our last proposition thus is

P6 Higher levels of specific IOL readiness directly and positively affect IOL adoption success.

Conclusion and Further Research

In this paper, we developed a research model that captures the leveraging effect of ITBA on different stages of the IOL adoption process. This model and the subsequent empirical validation will enhance our understanding of the organizational factors that affect the IOL adoption process by integrating findings from the IT business alignment literature with findings from the adoption of innovations stream of research.

As a limitation of the depicted model, we should state that we are aware that there also might be a moderating effect of IT business alignment on the link between specific IOL readiness and IOL adoption success. This effect however is out of the focus of our paper, because it implies issues of intra-organizational individual-level acceptance of the innovation which we have not discussed in this paper. Moreover, the model does not incorporate other adoption-relevant factors which are important in an interorganizational context – such as the relationship between the firms and the capabilities and attitudes of the partner firm.

Since the constructs and some of the hypotheses are already well grounded in theory, the appropriate research paradigm for the empirical validation of the proposed model is positivism. Nevertheless, within the positivist context we want to get deeper insights about what are the relevant facets of the chosen constructs in the relevant context of IOL adoption and therefore propose a sequential data collection process of both case studies and a subsequent quantitative approach which is fed by the case study results, as claimed for by Mingers (2001). For example, little is known about what exactly constitutes organizational readiness for IOL. We will carefully screen existing literature and derive dimensions and indicators for this construct. The case studies will then help us to assess the relevance of the different dimensions within expert interviews. In a later step, these dimensions will be validated within a quantitative survey.

Since the research model covers a process of adopting IOL, the case studies are required to fulfill two more criteria. First, they have to be conducted over a certain period of time since the whole process has to be accompanied by *repeatedly* measuring the different constructs and testing the propositions during the adoption process. Second, the case studies will also have to incorporate the counterpart, i.e. the firm which is the partner in the inter-organizational linkage.

The case studies are intended to give valuable insights for the design of the subsequent quantitative data collection step. By testing the proposed and refined research model, we hope to contribute to a more comprehensive understanding of IOL adoption from two antipodal perspectives: (1) how does intra-organizational IT business alignment contribute to an efficient and effective process of adopting IOL (i.e. alignment research perspective), and (2) what drives successful IOL adoption?

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References

- Amit, R., and Schoemaker, P.: Strategic assets and organizational rent. In: Strategic Management Journal (14) 1993, pp. 33-46.
- Aubert, B.A., and Patry, M., Rivard, S.: Assessing the Risk of IT Outsourcing. 31st Hawaii International Conference on System Sciences (HICSS-31), IEEE Computer Society, Honolulu, USA, 1998.
- Bassellier, G., and Benbasat, I.: Business competence of information technology professionals: conceptual development and influence on IT-business partnerships. In: MIS Quarterly (28:4) 2004, pp. 6733-6694.
- Beimborn, D., Franke, J., Gomber, P., Wagner, H.-T., and Weitzel, T.: Die Bedeutung des Alignments von IT und Fachressourcen in Finanzprozessen: Eine empirische Untersuchung. In: Wirtschaftsinformatik (48:5) 2006a, pp. 331-339.
- Beimborn, D., Franke, J., Wagner, H.-T., and Weitzel, T.: Strategy matters - The role of strategy type for IT business value. 12th Americas Conference on Information Systems (AMCIS), Acapulco, Mexico, 2006b.
- Bergeron, F., Raymond, L., and Rivard, S.: Ideal patterns of strategic alignment and business performance. In: Information & Management (41:8) 2004, pp. 1003-1020.
- Bhatt, G.D.: Managing information systems competence for competitive advantage: an empirical analysis. 24th International Conference on Information Systems (ICIS), Seattle (WA), 2003, pp. 134-142.
- Boynton, A.C., Zmud, R.W., and Jacobs, G.C.: The influence of IT management practice on IT use in large organizations. In: MIS Quarterly (18:3) 1994, pp. 299-318.
- Broadbent, M., and Weill, P.: Improving business and information strategy alignment: learning from the banking industry. In: IBM Systems Journal (32:1) 1993, pp. 223-246.

- Chan, Y.E.: Why haven't we mastered alignment? The importance of the informal organization structure. In: *MIS Quarterly Executive* (1:2) 2002, pp. 97-112.
- Chan, Y.E., Huff, A.S., Barclay, D.W., and Copeland, D.G.: Business strategic orientation, information systems strategic orientation, and strategic alignment. In: *Information Systems Research* (8:2) 1997, pp. 125-150.
- Chang, H.L., and Chen, S.H.: Assessing the Readiness of Internet-Based IOS and Evaluating Its Impact on Adoption. In: *System Sciences, 2005. HICSS'05. Proceedings of the 38th Annual Hawaii International Conference on* 2005, pp. 207b-207b.
- Chung, S.H., Rainer, R.K., and Lewis, B.R.: The impact of information technology infrastructure flexibility on strategic alignment and applications implementation. In: *Communications of the AIS* (11) 2003, pp. 191-206.
- Chwelos, P., Benbasat, I., and Dexter, A.: Research report: empirical test of an EDI adoption model. In: *Information Systems Research* (12:3) 2001, pp. 304-321.
- Cooper, A.C., and Zmud, R.W.: Information technology implementation research: a technological diffusion approach. In: *Management Science* (36:2) 1990, pp. 123-139.
- Daft, R.L.: A Dual-Core Model of Organizational Innovation. In: *The Academy of Management Journal* (21:2), June 1978, p. 193-210.
- DiMaggio, P.J., and Powell, W.W.: The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. In: *American Sociological Review* (48:2) 1983, pp. 147-160.
- Evans, J.S.: Strategic Flexibility for High Technology Manoeuvres: A Conceptual Framework. In: *Journal of Management Studies* (28:1) 1991, pp. 69-89.
- Fichman, R.G.: Going Beyond the Dominant Paradigm for Information Technology Innovation Research: Emerging Concepts and Methods. In: *Journal of the Association for Information Systems* (5:8), August 2004, pp. 314-355.
- Frambach, R.T., and Schillewaert, N.: Organizational innovation adoption - A multi-level framework of determinants and opportunities for future research. In: *Journal of Business Research* (55:2) 2002, pp. 163-176.
- Gallivan, M.J.: Organizational adoption and assimilation of complex technological innovations: development and application of a new framework. In: *The DATA BASE for Advances in Information Systems* (32:3) 2001, pp. 51-85.
- Galunic, D.C., and Rodan, S.: Resource recombinations in the firm: knowledge structures and the potential for Schumpeterian innovation. In: *Strategic Management Journal* (19:12) 1998, pp. 1193-1201.
- Goles, T., and Chin, W.W.: Information systems outsourcing relationship factors: detailed conceptualization and initial evidence. In: *The DATA BASE for Advances in Information Systems* (36:4) 2005, pp. 47-67.
- Hansen, M.T.: The search-transfer problem: the role of weak ties in sharing knowledge across organization subunits. In: *Administrative Science Quarterly* (44:1) 1999, pp. 82-111.
- Henderson, B.D., and Venkatraman, N.: Strategic alignment: leveraging information technology for transforming organizations. In: *IBM Systems Journal* (32:1) 1993, pp. 4-16.
- Henderson, J.C., and Sifonis, J.G.: The Value of Strategic IS Planning: Understanding Consistency, Validity, and IS Markets. In: *MIS Quarterly* (12:2) 1988, p. 186.
- Iacovou, C.L., Benbasat, I., and Dexter, A.S.: Electronic data interchange and small organizations: Adoption and impact of technology. In: *MIS Quarterly* (19:4) 1995, pp. 465-485.
- Jeyaraj, A., Rottman, J.W., and Lacity, M.C.: A review of the predictors, linkages, and biases in IT innovation adoption research. In: *Journal of Information Technology* (21) 2006, pp. 1-23.
- Kantor, R.M.: *When Giants Learn to Dance: Mastering the Challenge of Strategy, Management and Careers in the 1990s*. Simon and Schuster, New York, 1994, (as of).
- Kearns, G.S., and Lederer, A.L.: A Resource-Based View of Strategic IT Alignment: How Knowledge Sharing Creates Competitive Advantage. In: *Decision Sciences* (34:1) 2003, pp. 1-29.
- Kessler, E.H.: Organizational innovation: A multi-level decision-theoretic perspective. In: *International Journal of Innovation Management* (8:3) 2004, p. 275.
- Khalifa, M., and Davison, R.M.: SME Adoption of IT: The Case of Electronic Trading Systems. In: *IEEE Transactions on Engineering Management* (53:2), May 2006, pp. 275-284.
- Klein, K.J., and Sorra, J.S.: The challenge of innovation implementation. In: *Academy of Management Review* (21:4) 1996, p. 1055.
- Kuan, K.K.Y., and Chau, P.Y.K.: A perception-based model for EDI adoption in small businesses using a technology-organization-environment framework. In: *Information and Management* (38) 2001, pp. 507-521.
- Lederer, A.L., and Burky, L.B.: Understanding top management's objectives: a management information systems concern. In: *Journal of Information Systems* (3:1) 1989, pp. 49-66.
- Lederer, A.L., and Mendelow, A.L.: Information resource planning: overcoming difficulties in identifying top management's objectives. In: *MIS Quarterly* (11:3) 1987, pp. 389-399.
- Lederer, A.L., and Mendelow, A.L.: Coordination of information systems plans with business plans. In: *Journal of Management Information Systems* (6:2) 1989, pp. 5-19.

- Loh, L., and Venkatraman, N.: Diffusion of IT outsourcing: influence sources and the Kodak effect. In: *Information Systems Research* (3:4) 1992, pp. 334-358.
- Luftman, J.: Assessing business-IT alignment maturity. In: *Communications of the AIS* (4:14) 2000, pp. 1-50.
- Luftman, J., Papp, R., and Bries, T.: Enablers and inhibitors of Business-IT alignment. In: *Communications of the AIS* (1) 1999, pp. 1-33.
- Meyer, J., and Rowan, B.: Institutionalized organizations: Formal structure as myth and ceremony. In: *American Journal of Sociology* (83:2) 1977, pp. 340-363.
- Mingers, J.: Combining IS Research Methods: Towards a Pluralist Methodology. In: *Information Systems Research* (12:3) 2001, pp. 240-259.
- Nelson, K.M., and Coopridge, J.G.: The contribution of shared knowledge to IS group performance. In: *MIS Quarterly* (20:4) 1996, pp. 409-432.
- Papp, R.: Business-IT alignment: productivity paradox payoff? In: *Industrial Management & Data Systems* (99:8) 1999, pp. 367-373.
- Plouffe, C.R., Hulland, J.S., and Vandenbosch, M.: Research Report: Richness Versus Parsimony in Modeling Technology Adoption Decisions--Understanding Merchant Adoption of a Smart Card-Based Payment System. In: *Information Systems Research* (12:2) 2001, p. 208.
- Powell, T.C., and Dent-Micallef, A.: Information Technology as Competitive Advantage: The Role of Human, Business, and Technology Resources. In: *Strategic Management Journal* (18:5) 1997, pp. 375-405.
- Ramamurthy, K.: Moderating influences of organizational attitude and compatibility on implementation success from computer-integrated manufacturing technology. In: *International Journal of Production Research* (32:10) 1994, pp. 2251-2273.
- Reich, B.H., and Benbasat, I.: Measuring the linkage between business and information technology objectives. In: *MIS Quarterly* (20:1) 1996, pp. 55-81.
- Reich, B.H., and Benbasat, I.: Factors that influence the social dimension of alignment between business and information technology objectives. In: *MIS Quarterly* (24:1) 2000, pp. 81-113.
- Sabherwal, R., and Chan, Y.E.: Alignment between business and IS strategies: a study of prospectors, analyzers, and defenders. In: *Information Systems Research* (12:1) 2001, pp. 11-33.
- Sambamurthy, V., and Zmud, R.W.: At the heart of success: organization-wide management competencies. In: *Steps to the future: fresh thinking on the management of IT-based organizational transformation*, C. Sauer and P. Yetton (eds.), Jossey-Bass Publishers, San Francisco (CA), 1997, pp. 143-163.
- Sambamurthy, V., and Zmud, R.W.: Arrangements for information technology governance: a theory of multiple contingencies. In: *MIS Quarterly* (23:2) 1999, pp. 261-290.
- Saunders, C.S., and Clark, S.: EDI adoption and implementation: A focus on interorganizational linkages. In: *Information Resource Management Journal* (5:1) 1992, pp. 9-19.
- Scott, W.R.: *Institutions and Organizations*. Sage Publications, 2001.
- Tallon, P.P., Kraemer, K.L., and Gurbaxani, V.: Executives' Perceptions of the Business Value of Information Technology: A Process-Oriented Approach. In: *Journal of Management Information Systems* (16:4) 2000a, pp. 145-173.
- Tallon, P.P., Kraemer, K.L., and Gurbaxani, V.: Executives perception of the business value of information technology: a process-oriented approach. In: *Journal of Management Information Systems* (16:4) 2000b, pp. 145-173.
- Teo, H.H., Wei, K.K., and Benbasat, I.: Predicting intention to adopt interorganizational linkages: an institutional perspective. In: *MIS Quarterly* (27:1) 2003, pp. 19-49.
- Teo, T.S.H., and King, W.R.: Assessing the impact of integrating business planning and IS planning. In: *Information & Management* (30:6) 1996, pp. 309-321.
- Tiwana, A., Bharadwaj, A., and Sambamurthy, V.: The antecedents of information systems development capability in firms: a knowledge integration perspective. 24th International Conference on Information Systems (ICIS), Seattle (WA), USA, 2003, pp. 246-258.
- Venkatraman, N., and Ramanujam, V.: Measurement of business economic performance: an examination of method convergence. In: *Journal of Management* (13:1) 1987, pp. 109-122.
- Wagner, H.-T.: *A Resource-based Perspective on IT Business Alignment and Performance - Theoretical Foundation and Empirical Evidence*. Doctoral Dissertation, Goethe University, Frankfurt am Main, 2006.
- Wagner, H.-T., and Weitzel, T.: Modeling the impact of alignment routines on IT performance: an approach to making the resource based view explicit. 38th Hawaii International Conference on System Sciences (HICSS-38), Waikoloa, HI, USA, 2005.
- Wagner, H.-T., and Weitzel, T.: Operational IT Business Alignment as the Missing Link from IT Strategy to Firm Success. 12th Americas Conference on Information Systems (AMCIS 2006), Acapulco, Mexico, 2006.

Zmud, R.W.: Building relationships throughout the corporate entity. In: Transforming the IT organization: thhe mission, the framework, the transition, J. Elam, M. Ginzberg, P. Keen and R.W. Zmud (eds.), 1988, Washington, 1988, pp. 55-82.