Introduction

IT/IS-business alignment has been a topic of considerable attention for over three decades (e.g., Chan and Reich, 2007; McLean and Soden, 1977). Alignment has been consistently rated as a top ten IT management concern (Luftman et al., 2013). Conceptually, alignment has been defined variously as the degree of fit and integration between an organization’s business strategy, IS strategy, business structure (and/or business processes), and IT infrastructure (Chan and Reich, 2007; Galliers, 2006; Henderson and Venkatraman, 1993). A common theme has been the argument that alignment leads to a more focused and strategic use of IT (Chan et al., 2006), and that those organizations that are able to successfully align their business and IS/IT tend to perform better than their counterparts (e.g., Chan et al., 1997; Kearns and Lederer, 2003).

Nuanced accounts of alignment have appeared. It has been argued that alignment is infeasible if the business strategy is unclear, and the difficulty of matching a relatively fixed set of IT assets to constantly changing business imperatives has also been noted (Galliers, 2004). Others argue that IT should challenge and transform the business, not simply align with it (e.g., Chan and Reich, 2007), while others still criticize the alignment literature for being too conceptual and not reflecting actual practice (Ciborra, 1997). Normative approaches are argued to not account for organizations as organic, dynamic and ambiguous aggregates, with relationships that are parallel and simultaneous (e.g., Tsoukas, 1994), requiring a refocusing on the practices and activities of aligning as opposed to alignment per se (Karpovsky and Galliers, 2015; Wilson et al., 2013). Further, empirical results are argued to be lacking in precision, with the resultant models being prone to subjectivity (Avison et al., 2004).

To reflect on the state of the alignment research, we embarked on a study of the extant literature. We aimed to determine what we currently know about aligning practice with a view of developing a framework to describe actions that constitute aligning. We argue that alignment research requires greater focus on organizational actors’ day-to-day aligning activities. A contribution of this chapter is a delineation of a set of aligning activities that serve as a base for future research about the mechanisms actors use to align IS with ongoing processes and strategic imperatives.
The chapter is structured to provide context for our study before discussing the research method adopted and our findings. In the next section, we present a brief review of the extant literature that views alignment as a dynamic process. In the subsequent section, we provide a discussion of the method we employed in our analysis of those cases that report on the actual activities associated with alignment. We go on to report on our findings and conclude with a discussion of a future research agenda.

An overview of the literature on alignment as a dynamic process

In line with some earlier studies, we conceptualize alignment not as a static end-state but as a continuous, ongoing process of aligning involving a series of activities resulting in adjustments in various dimensions and across various organizational levels. Some of the prior research suggests that the alignment process represents a continuous synchronization (Smaczny, 2001) or integration by the organization of various technological, organizational, and relational dimensions (Fuchs et al., 2000). Rondinelli et al. (2001) suggest that organizations should continuously readjust and realign four sets of strategic components: business strategy, market penetration decisions, management processes, and structures. For others (e.g., Sabherwal et al., 2001), although the alignment process retains its dynamic nature, it is effecuated on an ad hoc or punctuated rather than continuous basis, depending upon the evolutionary phases experienced by the organization concerned as well as the evolution of its business environment: organizations may experience relatively long periods of minor, evolutionary strategic change, and relatively short periods of sweeping, revolutionary strategic change.

A number of process models of alignment have arisen from this line of research. For example, the “Strategic Alignment Maturity Model” (SAMM) (Luftman, 2000) posits that, as organizations pursue the goal of strategic alignment, alignment moves through the following process stages: (1) initial, ad-hoc; (2) committed; (3) established, focused; (4) improved, managed; and (5) optimized. Luftman argues that the greatest benefit to an organization is found when strategic alignment is an optimized process. Thus, the SAMM explores the “maturity” of strategic alignment and focuses not on the goal of alignment, but on developing processes that will enable ongoing alignment. Peppard and Breu (2003) propose a co-evolutionary model to describe how IS strategies ‘co-adapt’ with business strategies, where each is considered distinct yet mutually influencing. Additionally, Hirschheim and Sabherwal (2001) suggest that organizations seek alignment through incrementalism – changing one or more components of alignment, then changing some other, and occasionally reversing earlier changes.

Several specific steps and subprocesses have been suggested to foster movement toward alignment. These include evaluating the performance of senior executives, in part by noting their innovative use of IT; allowing IT to provide innovative ideas that will shape the business; embedding IT in multiple departments and business processes; using IT to provide strategic flexibility to the business; giving the CIO visibility among the senior executives; and encouraging IT executives to collaborate with business unit and regional managers to develop new capabilities (Agarwal and Sambamurthy, 2002). Additionally, Kearns and Lederer (2003) propose two specific processes associated with key actors that contribute to strategic alignment: the CEO participating in IS/IT planning, and the CIO participating in business planning. Although the identification of these processes provides insight into means of achieving alignment, it appears that while these processes are a necessary condition they may not be sufficient. A comprehensive, multifaceted conceptualization of strategic alignment appears still to be missing.
Aligning in practice

From macro processes to micro practices

While we, thus, have a good understanding of alignment processes as a result of this line of research, we nonetheless know little about what managers and other actors actually do in their day-to-day activities to achieve alignment (Campbell, 2005). In order to fill this gap, we extend the conceptualization of alignment from not only something that an organization attains to something that an organization does: as “a pattern in a stream of goal-oriented activity over time” (Jarzabkowski, 2005: 40). From this perspective, we differentiate ourselves from the (macro) process perspective on alignment by focusing on micro processes, activities, and practices (cf. Peppard et al., 2014; Whittington, 2014).

While the process stream of research considers alignment at various levels of an organization, it tends to focus primarily on the organizational or strategic business unit (SBU) level, with the associated unit of analysis being the sequence of ‘high-level’ organizational events that take place within a period of adjustment. In contrast, we take an activity-based view of aligning practice where activity is the unit of analysis and is associated with the actions of and around organizational actors. Consequently, we view aligning practice broadly as all organizational actors’ activities that may contribute to tightening links between IT and business across an organization. Taking this extended conceptualization of aligning practice, we reviewed the alignment literature to derive a set of activities based on published cases. Before presenting our findings, we briefly discuss the research method employed.

Research approach

To obtain an overview of the alignment literature, using a structured methodology (Webster and Watson, 2002), we reviewed over 9,000 articles from the IS, strategic management, and management literatures concerned with ISS and related topics (Karpovsky et al., 2014). To narrow our search, we conducted screening of articles in three rounds and used the following criteria to code: (1) the word “alignment” appears in the title or keywords, or (2) the body of the article discusses or mentions alignment-related themes. Then we looked for articles that (1) reported an instance of alignment, (2) reported organizational actions and actors’ activities, and (3) provided a rich description of the events.

Findings

We identified 37 articles that discussed alignment activities in some detail. Appendix 1 lists all the case sources.

An iterative analytical technique was used to develop the categorization of aligning activities. The preliminary working themes were constructed through a process of abstracting and generalizing (Strauss, 1987). Coding took the form of a thematic content analysis of the case materials (cf. Mostyn, 1985). The categories were interpreted and reconstructed in light of existing alignment themes (e.g., De Haes and Van Grembergen, 2009; Valorinta, 2011). The final list is presented in Table 22.1.

Two basic conceptual distinctions helped us to organize how the different aspects of aligning have been considered in previous research – the focus and the purpose of the aligning activity. In terms of focus, the alignment literature has widely acknowledged a distinction between two dimensions of alignment: social and intellectual (Chan and Reich, 2007). The social dimension refers to factors such as the choice of actors, their degree of involvement, and
### Table 22.1 Aligning activities: coding and categorization

<table>
<thead>
<tr>
<th>Aligning Activity Code</th>
<th>Aligning Activity Category</th>
<th>Illustration</th>
<th>Metaphor</th>
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<tbody>
<tr>
<td>New governance structure</td>
<td>RECONFIGURING</td>
<td>“The Board interpreted events as raising a new contingency, requiring a structure that would enable managers to use the information the system now provided, and so in 1992 they gave those managing the five geographical division greater autonomy” (Boddy and Paton, 2005: 147).</td>
<td>Aligning as Translation</td>
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<tr>
<td>Transformation</td>
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<td>“To support the new direction for Information Systems, Johnson created three new organisational structures. First, a group of senior executives and two independent external consultants met bimonthly as the Information Services Executive Committee. Although the CEO sponsored this meeting, McKean chaired it. The Information Services Executive Committee’s purpose was to focus on business issues and ensure that the top team was committed to and satisfied with the projects delivered on their behalf” (Thorogood et al., 2004: 131).</td>
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<td>Turnaround</td>
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<td>Restructuring IT</td>
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<td>“SDMC applied IT applications to production scheduling and mold designing, intending to reduce operational costs and improve new product development capabilities” (Wang et al., 2011: 424).</td>
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<td>organization</td>
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<td>“An analysis of RED transactions of a department yielded missing applications and application features . . . The BIOS committee, made up of the departmental directors and account managers, now had objective information with which to prioritize the portfolio” (Ramnath and Landsbergen, 2005: 62).</td>
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<td>Outsourcing</td>
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<td>Reward system</td>
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<td>Integration</td>
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<tr>
<td>New system</td>
<td>DEVELOPING</td>
<td>“Management interpreted key contingencies in the context as requiring them to plan and implement a system which would implement the founder’s strategic vision for an EPOS system. This closely matched the manual procedures, and staff interpreted the change as reinforcing the existing (effective) alignment between them and their work. It enabled centralization and allowed depot managers to concentrate on customers” (Boddy and Paton, 2005: 146).</td>
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<td>development</td>
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<td>“Johnston brought in Chris James to develop relationships with strategic business partners and to act as the account manager, representing IS to the business. James was responsible for managing relationships with strategic partners, primarily Aspect Computing, and for managing relationships with other business units such as the laboratory and Water Services” (Thorogood et al., 2004: 131).</td>
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<tr>
<td>Business-focused IT</td>
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<td>“Key personnel were sent to training seminars to learn and master the essence of the balanced scorecard theory and techniques” (Huang and Hu, 2007: 176).</td>
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<tr>
<td>User/IT relationship</td>
<td>STRENGTHENING</td>
<td>“User/IT relationshipIT-business communication Top management involvement CIO/CEO relationship IS/business partnership Culture change IT training Human resource management/training Reinforcing Strengthening</td>
<td>Aligning as Integration</td>
</tr>
<tr>
<td>IT-business communication</td>
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<tr>
<td>Success measures</td>
<td>EVALUATING</td>
<td>Aligning as</td>
<td>Adapting</td>
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<td>Reactive response</td>
<td>&quot;Many private firms and large international logistics firms entered the business area where AMY operated after China's accession into the WTO, which led to a more competitive environment. The oversupply of mechanical and electrical products strengthened the bargaining power of customers and altered the industrial structure. In this environment, AMY's inefficient traditional sales management led to excessive overstock. In 1999, AMY lost over 40 million RMB because of overstock&quot; (Wang et al., 2011: 423).</td>
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<td>Separation of information/technology management</td>
<td>&quot;Following a consulting firm's report in 1993, the CEO and the other senior managers began recognizing the need for major changes to respond to several international companies' entry into Australia&quot; (Hirschheim and Sabherwal, 2001: 95).</td>
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<tr>
<td>Clarifying objectives</td>
<td>&quot;Many customers placed orders without fulfilling their promise to make the payment, creating lots of unpaid accounts receivable&quot; (Wang et al. 2011: 426).</td>
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<tr>
<td>Scanning emerging technologies</td>
<td>&quot;One library visited was one of their largest single customers. They had only 1 or 2 booking requests per day. In this situation, they viewed the telephone as the relevant technology for ordering films and videos. They would resist paying for equipment for an on-line connection and for the training of their staff to use the booking system that the Film Board had in mind&quot; (Simonsen, 1999: 13).</td>
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<tr>
<td>External factors</td>
<td>&quot;In the past few years, our sales income and profit went down sharply. We should find some ways to stop this. We realized that we need good integrated computer systems, and we couldn't follow the way we walked along before&quot; (Wang et al., 2011: 424).</td>
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<tr>
<td>Review</td>
<td>&quot;The value of IT was questioned by many academics and executives at that time. Some consultants and IT professionals suggested this B2B project be delayed because they thought the investment was too high, while the chance of success was rather slim&quot; (Wang et al., 2011: 426).</td>
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<tr>
<td>Prioritization</td>
<td>&quot;Decision making&quot;</td>
<td>Aligning as</td>
<td>Experience</td>
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<tr>
<td>Resistance to change</td>
<td>&quot;In the past few years, our sales income and profit went down sharply. We should find some ways to stop this. We realized that we need good integrated computer systems, and we couldn't follow the way we walked along before&quot; (Wang et al., 2011: 424).</td>
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<tr>
<td>Meetings</td>
<td>&quot;The value of IT was questioned by many academics and executives at that time. Some consultants and IT professionals suggested this B2B project be delayed because they thought the investment was too high, while the chance of success was rather slim&quot; (Wang et al., 2011: 426).</td>
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<tr>
<td>Politics</td>
<td>&quot;Decision making&quot;</td>
<td>Aligning as</td>
<td>Experience</td>
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<tr>
<td>Learning the business</td>
<td>&quot;In the past few years, our sales income and profit went down sharply. We should find some ways to stop this. We realized that we need good integrated computer systems, and we couldn't follow the way we walked along before&quot; (Wang et al., 2011: 424).</td>
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<tr>
<td>Organizational learning</td>
<td>&quot;The value of IT was questioned by many academics and executives at that time. Some consultants and IT professionals suggested this B2B project be delayed because they thought the investment was too high, while the chance of success was rather slim&quot; (Wang et al., 2011: 426).</td>
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<tr>
<td>Decision making</td>
<td>&quot;In the past few years, our sales income and profit went down sharply. We should find some ways to stop this. We realized that we need good integrated computer systems, and we couldn't follow the way we walked along before&quot; (Wang et al., 2011: 424).</td>
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the methods and modes of communication and decision making (Reich and Benbasat, 2000). The focus is on the actors and their actions and cognitions. Conversely, intellectual alignment refers to the degree to which the business strategy and the IS strategy are congruent (Kearns and Lederer, 2000). The focus is on a set of tools – methodologies, techniques, technology, plans, and data used in the form(ul)ation of alignment. In terms of purpose, aligning actions can be deliberate or emergent. Deliberate actions have a planned outcome and are performed in a methodical and intentional manner. Emergent actions have an evolving, sometimes unintended and unpredictable outcome and are performed in a more spontaneous manner.

Combining the two dimensions yields a $2 \times 2$ matrix that locates four metaphors that can be used to describe aligning as: experience, integration, translation, and adaptation (see Figure 22.1). Aligning as experience and aligning as integration represent a set of activities primarily involving human dynamics; however, while integration activities are characterized as deliberate and instrumental in nature, aligning as experience suggests a set of evolving activities that emerge from unplanned or unintended situations. Similarly, both aligning as translation and aligning as adaptation suggest activities that involve generation and execution of plans and other intellectual imperatives, but the purpose of these activities differs. While translation is anticipated action, adaptation is more unpredicted and evolving. The sections that follow expand on each of these types of activity and provide illustrative examples from the analyzed case studies.

### Aligning as adaptation

We identified a number of activities as aspects of adaptation. These activities are mainly focused on tools as it is necessary to determine whether a new system needs to be implemented or enhanced. These actions emerge as a result of the advent of new conditions that are not necessarily foreseeable or cannot be easily planned for. Some form of improvisation might be evident here. The nature of these activities is, therefore, emergent with a main focus on tools.

Given the need to be aware of the new conditions, tools are applied in continuously EVALUATING the environment and ascertaining how technology can support or enable future operations. About half of articles in our final set report on some form of evaluation of the internal and/or external environment. Evaluating practices are usually reported as something that happens before aligning processes are themselves enacted. Examples include when an organization evaluates its context or seeks to clarify its objectives or business focus (e.g., Sillince and Frost, 1995; Simonsen, 1999), scans emerging technologies (e.g., Tarafdar and Qrunfleh, 2009), or prioritizes applications and application features (e.g., Dutta, 1996; Ramnath and Landsbergen, 2005) prior to any change process taking place. Further, evaluation of the strategic focus might
reveal contradictions in the overall organizational strategy and might indicate new system needs (Simonsen, 1999).

**Aligning as translation**

Achieving alignment has traditionally been seen as a part of a CIO’s duties, typically involving communication and strategy translation at executive levels (Sabherwal et al., 2001). A number of studies suggest that business and IT ‘speak’ a different language (e.g., Bassellier and Benbasat, 2004; Rosenkranz et al., 2013), and aligning would thus need to involve IT personnel understanding business needs and rendering these into IT solutions. These translations involve *intentionality*: clarifying existing strategies; prioritizing projects; formulating and implementing plans; applying a set of planning methodologies; and consequently, capturing, through the use of *tools*, planning methodologies or systems.

*Developing* a new system is a common activity of translating that aims to find new IS solutions to align with what may often be a new strategic imperative. In certain cases, developing entails the consolidation or rebuilding of systems or services rather than implementing a completely new technology (e.g., Sauer and Willcocks, 2003). Nonetheless, developing is *tools*-focused and is based on *deliberate* approaches to system implementation. More than half of the articles describe the development of a new system. For example, Vayghan et al. (2007) report that IBM developed and deployed data solutions for its customers as well as within IBM itself as part of their transformation. Dutta (1996) reports on the creation of NovaRede – a new distribution network, with small branches enabled by new IT infrastructure in a Portuguese bank, while Ives et al. (1993) describe challenges of development of a worldwide financial reporting system, an inventory management system, and a new customer profitability analysis system in a multinational company.

*Reconfiguring* activities also classify as translation-related actions as they also focus on *intellectual* aspects of aligning such as structures and arrangements. Reconfiguring refers to activities related to such restructuring actions as a change in the governance and management of IT including outsourcing. Restructuring governance and the IT function is the most commonly observed action. For example, Sauer and Willcocks (2003) report on Oracle changing country managing directors’ performance measures so that they would be more cost-conscious, with the IT function becoming centralized – as a corporate entity – rather than being country-based as was previously. Similarly, Boddy and Paton (2005) describe the introduction of divisions with profit responsibilities in a chain of roadside vehicle repair depots. Outsourcing is also a major activity when it comes to aligning. Dutta (1996) describes an organization that had outsourced its IT and had to create a technical oversight group and a 20-person team to coordinate with the vendors.

**Aligning as integration**

The alignment literature recognizes that open and effective exchanges and interactions help IT and business work well together (Brown and Ross, 1996). We found a number of *deliberate* activities that focused on integrating IT/business planning by bringing IT and business functions or tasks closer together to strengthen the communication, understanding, and perspectives between them. These activities revolve around *actors* and the necessary steps needed to develop a unified entity in an effort to enable alignment to take place.

We classified *strengthening* activities in terms of aligning as integration because, similar to aligning as translation, these are actions stimulated by *deliberate* procedures. Unlike aligning...
as translation, these activities are focused on bringing IT and business people together and enabling a smoother process of mutual understanding and appreciation, invoking the social dimension of alignment discussed earlier. Primarily, these involve the strengthening of relationships between various organizational groups. To illustrate, some studies consider “joint” language – to improve the quality of communication between business and IS (e.g., Powell and Powell, 2004). Sauer and Willcocks (2003) suggest advocacy on the part of CIOs in helping their senior business colleagues to become more sensitive to the challenges associated with designing and managing technology platforms. User participation has also been reported as a means of strengthening aligning processes. Dutta (1996) describes how users submitted new software development proposals to business groups who then channeled these proposals to user committees. Training, with respect to both IT for non-IT personnel, and with respect to business issues for IT personnel, has also been reported as a practice that might strengthen alignment – both in terms of the process and the outcome. For example, Chan (2002) reports on information sessions and technology demonstrations. Coughlan et al. (2005) consider the acquisition of “hybrid skills” and Martinez (1995) highlights the skills necessary for large project management.

Another set of activities classified as integration is signaling. These activities are people-focused because they might affect and reshape actors’ views or attitudes and might involve changes in roles. For example, a number of cases highlight the establishment of a new position (e.g., Chen et al., 2008; Grant, 2003) or, more commonly, a new appointment to an existing position (e.g., Johnston and Yetton, 1996). To illustrate, Sabherwal et al. (2001) report on the establishment of a new IS director position at an equipment sales company. The position was created to signal the strategic role of IS, however, it was discontinued later as the perceived importance of IS diminished – a further signal. The location of the IT division has also been found to be symbolic of working relationships and, ultimately, (mis)alignment between IT and organizational priorities (e.g., Coughan et al., 2005).

Aligning as experience

A number of reported activities focused specifically on individuals and their actions. These actions are indicative of the emergent nature of organizing practice. Negotiating – political activities in general – is commonplace in organizational life, and aligning is no different in this regard. A number of studies touch on the issue of organizational politics and external political pressures. For example, Sillince and Frost (1995) describe IS-related reforms in primary care that were pushed through to head off political opposition by the medical professionals. This case was contrasted with another concerned with the work of the national police force. Here, Sillince and Frost note that politicians did not want to be “saddled” with a reputation for having shaped the police force – not wanting “to be remembered as having reinforced European federalism” (Sillince and Frost, 1995: 113). Authors make the point that, in a different political situation, different organizational practices would likely be apparent. The reduced – or absent – pressure impacted aligning practice, as the police force was able to be more flexible in making IS-related decisions and thus – potentially at least – to be in a better position to align its practices.

Illustrations of negotiating can also be found in the private sector. For example, Dutta (1996) reports on an instance of negotiating when a list of proposed IS projects was assembled from a number of user groups. Conflicts arose as the IT users’ committee had to determine relative priorities of the proposals.

A process of LEARNING is inherent in aligning practices. We considered those learning activities that are actor-focused and address the process of intuiting and interpreting. This
Aligning in practice

Aligning in practice

process is emergent and distinctive from the strengthening activities which are associated with training and are deliberate in nature. Learning concerns, for example, the creation of novel insights; building actions based on experience, and developing business awareness (Bontis et al., 2002), are evolving. Salmela and Ruohonen (1992) observed learning to be the single most important aspect of aligning, where organizational members continuously learn to focus on IS as an opportunity for organizational change. Conversely, it has been reported that IT personnel should learn more about the business to facilitate alignment. Chen et al. (2008) provide the example of IT staff expending considerable effort to understand the manufacturing process of a semiconductor company.

Aligning will ultimately involve decisions that actors must make concerning IS/IT and business functions. Decision making is a social activity undertaken by individuals within organizations. Such activities are also emergent in nature as decisions need to be made as issues arise. Hirschheim and Sabherwal (2001) describe how a new CEO makes a decision to shift centralized IS to a more distributed form in a company that changed its strategy to one focusing more on efficiency. A number of studies report specifically on decisions made by the CEO, with or without discussion or agreement with those responsible for IT (e.g., Dutta, 1996; Sabherwal et al., 2001; Sauer and Wilcocks, 2003). Wang et al. (2011) show how conservatism and culture can have an impact on the decisions made. Overall, we found few cases of decision-making practices.

Discussion: a research agenda for aligning in practice

Our extension of prior conceptualizations of alignment as aligning practice, consisting of aligning activities, allows for a more holistic treatment of alignment at multiple organizational levels and across multiple dimensions, as called for by Chan and Reich (2007). Such a conceptualization allows alignment research to move away from studies that focus solely on the antecedents, enablers, and inhibitors of alignment, to research that focuses on the activities of aligning where actors do ‘aligning.’ When alignment is thought of primarily as an outcome of a macro-level process, consisting of phases and stages, knowledge of the rich and complex ways in which actors translate, adapt, integrate, experience, and thus ‘make’ alignment happen, is limited.

A contribution of this chapter has the introduction of a framework (Figure 22.1), which shifts alignment discourse away from characterizations of alignment or misalignment toward an understanding of how actors are engaged in the practice of aligning and what types of activities are involved in that practice. The categorization of activities that emerges is a resource to guide future empirical research. We do not claim that our list of aligning activities is exhaustive; rather, it represents an illustration of what is known or what can be inferred from current research. We anticipate that future research will reveal and explicate other relevant activities.

Suggestions for future research

We conclude that the majority of the literature considers the alignment process as following prescribed methodologies, assuming rational decision making, and is often sequential in nature. A focus on activities suggests instead that aligning practice is more organic in nature, being subject to political and interpretive influences (Jarzabkowski, 2003). One implication of this view is that studying processes and actors independently may be less analytically useful than has been assumed. While aligning as adaptation and translation presumes intellectual-level activities materializing at the level of plans and objectives, it is through the individual
Ana Karpovsky and Robert D. Galliers

use and creation of these tools, and amid individual actions of actors, that aligning happens. Conversely, while aligning as integration and experience both involve individual actions and interactions, it is the actions and interactions that also occur in relation to the usage of tools that constrain and/or enable these actions. As such, aligning activities are interrelated and inseparable in practice. If one considers activities inherent in the practices of aligning around strategies and plans, one needs to acknowledge the role of social actors and their actions. Thus, in order to understand and facilitate aligning, examination is needed not only of specific tools or actors, but also the rich interactions within which people and things are engaged in doing ‘alignment work.’

Taking the perspective on alignment as aligning practice allows us to unite the social and intellectual dimensions of alignment. In particular, a consideration of the recursive loops between the social and the intellectual could provide an integrated understanding of how actors mobilize tools and how tools can assemble actors to attain alignment outcomes. Therefore, one avenue of research might be to study the use of alignment tools in practice. While we know about the tools available in aligning practice – the methodologies and approaches used in ‘translations’ – we do not yet know the precise nature of the ‘tools’ the practitioners actually use, nor how they use them. For example, while such tools as balanced scorecards (Huang and Hu, 2007), Andersen Consulting’s Method-1 (Lederer and Gardiner, 1992), IBM’s Business Systems Planning (BSP) (Zachman, 1982), Information Engineering (Martin and Leben, 1989), and Total Information Systems Management (Osterle et al., 1993) have been introduced, studies suggest that practitioners ignore or modify them, or develop their own methods (e.g., Teubner, 2007). Potential research questions would relate to, for example: (1) How are alignment tools applied in practice? (2) Which tools are utilized and in which context? (3) Are they used in ways in which they were intended? (4) Are the plans and strategies followed mechanistically or used as a guideline in practice? (5) Do tools evolve over the period of aligning and, if so, how do they evolve?

In addition, the strategy-as-practice literature uncovers various impacts of tools such as PowerPoint presentations (e.g., Kaplan, 2011) and social media (e.g., Huang et al., 2013) on strategy formation. Can the use of such tools also be observed in aligning practice? Do aligning practices differ from other organizational practices previously studied? From the literature we have analyzed, it becomes clear that, while we are starting to understand something of the activities involved in the process of aligning, what is still missing are studies on this “internal life of a process” (Brown and Duguid, 2000: 94).

The lack of focus on micro processes is evident from the relative scarcity of literature on, for example, decision-making activities and politics involved in aligning. Actors make various decisions in relation to business processes and associated IS, and therefore, decision making becomes central to aligning. Decisional factors such as the motivating reason(s) behind the drive toward achieving strategic alignment can shape the process of its achievement (Negoita et al., 2013). However, there is little discussion of decision making in the practices associated with aligning. Understanding these practices is crucial in helping practitioners deal with the challenges associated with aligning. The extant alignment literature usually considers the decisions made “in terms of actions taken, the resources committed, or precedents set” (Mintzberg et al., 1976: 246), but not how these decisions emerge or what the implications might be.

Further, we know from prior research that decision making is infused with politics (Eisenhardt and Bourgeois, 1988); however, the alignment literature rarely considers the contestation and dialogue involved. It goes without saying that negotiating is part of organizational life – and this includes aligning activity, given that it involves multiple organizational members with a variety of personal as well as collective agendas. Echoing the recent call for the
incorporation of the concept of power into the study of IS strategizing (Marabelli and Galliers, 2017), we suggest a greater focus on power in future research on aligning practice. For example, researchers should revisit the discussion on the role of CIOs (e.g., Gerow et al., 2012; Karpovsky and Galliers, 2013, Preston et al. 2008) and consider the influential role these executives might play in aligning practice.

The framework that we introduced herein may prove to be a useful starting point on which to base such investigations. We argue for going beyond simply explaining organizational activities that are considered to be part of aligning by also focusing simultaneously on activities at multiple levels beyond the level of the organization. As can be observed from Appendix 1, which lists all the articles considered in order of the number of categories of activities observed, only a few studies have captured the full set of proposed categories. We argue that it is through the focus on day-to-day activities that we will better be able to present a more comprehensive picture of aligning practice. Once we have this better understanding of aligning activities, and the actors involved, we would be in a better position to consider micro processes of aligning, the tools used in aligning, and the unconscious actions that are performed by ‘alignment actors.’

An expanded range of research methods is necessary to pursue this research agenda. Our view of aligning as practice suggests different units of analysis for research. That is, alignment scholars would not only center on the organization as a uniform whole, but also consider decisions, individuals, groups, projects, and tools. To undertake this program of research, a wider range of research methods may need to be employed. Current work in the strategy-as-practice domain is dominated by observational field studies (e.g., Kaplan and Orlikowski, 2013). If our intention is to comprehend practices, there is little or no substitute for spending time in the field observing actors engaged in their daily work-related activities (Jarzabkowski and Kaplan, 2014). A difficulty in undertaking such research, however, is that it is challenging to determine, a priori, which of the activities and interactions are related to aligning practice (Bechky, 2008). Consequently, going into the field to observe actors ‘do’ aligning work requires being in the right context at the right time (Jarzabkowski and Kaplan, 2014). To capture aligning as it unfolds doubtless requires longitudinal study (e.g., Pettigrew, 1990). In addition, combining approaches might be valuable. Different approaches focus attention on different aspects of the object of study, thereby providing a richer, more complete picture (Mingers, 2003). Interviews and surveys are valuable supplements (Jarzabkowski and Kaplan, 2014).

There are a number of potential extensions to our findings that could be explored in future research. These include examining a broader range of contexts, actors, and their aligning activities. Our focus in this study has been on those aligning activities that have been reported in existing, published cases in the academic literature. We might suppose, however, that there are activities and actors that have not thus far been reported upon that might well reflect additional aligning practices. For example, while Grant (2003) reports on such aligning activities as restructuring, hiring, and outsourcing, who was involved, and how they went about these tasks remains unclear. In many cases, we have yet to know who are the ‘alignment practitioners’ and what they actually do to align organizational processes, structures, and functions. Similarly, Roepke et al. (2000) present an account of 3M’s alignment initiatives, and in particular, their IT management development programs. However, the case fails to account for the manner in which employees’ attitudes changed over time.

Most alignment research has focused on aggregate classes of actors (e.g., ‘top management,’ ‘IS management,’ ‘middle management’), and has attributed specific activities to these archetypes. Consequently, the description of activities performed by these aggregate actor classes becomes abstracted, and somewhat distant from the everyday activities of any individual actor.
We suggest a research agenda that focuses on a wider range of individual actors and their everyday work practices in interaction with others. We further suggest that ‘external’ actors (i.e., those outside of the organization concerned), with whom ‘internal’ alignment practitioners interact, should also be studied in ongoing studies of aligning practice. We found only a very few external groups to have been considered thus far. Sillince and Frost (1995) incorporate the role of politicians with respect to the aligning practice of public sector organizations. Consultants and researchers – the latter partially playing the role of consultants as well in action research studies – have been considered in certain studies (e.g., Powell and Powell, 2004; Salmela and Ruohonen, 1992). The strategy literature indicates that ‘strategy gurus’ and business media actors play important roles in organizational activities (e.g., Clark and Greatbatch, 2002) and, consequently, should be studied in the context of aligning.

Lastly, future research should consider a wider range of contexts. For example, not-for-profit organizations (charity or service organizations) might have a different set of approaches to goal specification and assessment (Newman and Wallender, 1978), methods of performance measurement (Kanter and Summers, 1987) and marketing and competitive practices (Rangan et al., 1996). Consequently, this sector could provide a fruitful setting for comparing the set of aligning activities taking place. Studying these and other related settings and novel sets of actor groups might hold promise.

Implications for managers

Alignment research has provided managers with a number of methodologies (e.g., Huang and Hu, 2007; Lederer and Gardiner, 1992; Zachman, 1982). However, it has been argued that such tools should not be mechanistically applied in practice, but rather used as means for surfacing assumptions, questioning interests (e.g., Galliers and Sutherland, 1991). Methods are often talked of in terms of the “instrumental mode” (Astley and Zammuto, 1992: 453) of contributing managerial techniques, often associated with the notion of “best practices.” Yet, in practice, methods are not operationalized precisely as they are designed. For example, IS/IT plans do not typically describe how IT and business personnel have to interact to put these plans into action, and formal conventions often play only a minor part in the interactions between business and IT (Chan, 2002). Recognizing the range of aligning activities involved in practice, such as the ones identified in our study, should allow managers to realize and prepare themselves for unforeseen challenges in alignment.

Concluding remarks

The intention of this chapter has been to serve as a catalyst for a broader and richer agenda for alignment research. We believe that this is an important research topic as it goes to the very essence of the strategic value of IT in organizations and develops a link between business and IT-related issues. The categories of aligning activities that have been described here are somewhat nuanced, but introduce a new departure for research in this domain. Specifically, we propose a subtle shift of focus from the alignment process to aligning practice, with emphasis being placed on day-to-day activities rather than abstract phases. We argue this point of departure can help alignment research to become more relevant to practice, as called for by Arvidsson et al. (2014) and to practitioners – the people who ‘do’ aligning. The research agenda we outline recognizes trends in other fields, such as in strategic management (cf. Whittington, 2014), and encourages IS researchers to respond by increasing their theoretical and empirical efforts with respect to aligning practice.
Aligning in practice

Notes
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3 Hereinafter, we shall use the simple term “alignment.”

References


Aligning in practice


Ana Karpovsky and Robert D. Galliers


Aligning in practice


# Appendix 1
## CASE SOURCES

<table>
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<tr>
<th>Article</th>
<th>Reconfiguring</th>
<th>Decision-making</th>
<th>Negotiating</th>
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