Best-fit Alliance Partners: The Use of Critical Success Factors in a Comprehensive Partner Selection Process^{*}

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Abstract

Firms increasingly form alliances to access needed capabilities, gain knowledge and seek competitive advantage. Strategic alliance partner selection is a critical aspect of successful alliance development; even superior alliance management may not be sufficient to overcome poor initial partner screening and selection efforts. Prior partner selection research has typically focused on generic, conceptual motivations for alliances, addressing only some pieces of the partner selection puzzle; in addition, previous research has been static and has not presented a way to operationalize partner selection analysis. This paper presents a new conceptual comprehensive partner selection framework that includes dynamic partner selection considerations. In addition, a new analytical partner selection tool is presented to illustrate how firms can operationalize their partner selection analysis process. Developed and tested with input from over two hundred alliance managers, the comprehensive partner selection framework includes new perspectives and an analysis of four critical alliance partner selection criteria, or critical success factors (CSFs): task-related CSFsfactors that facilitate or inhibit the successful completion of desired alliance objectives; learningrelated CSFs-critical, desired attributes in potential alliance partners that enhance learning outcomes; partnering-related CSFs—relational factors that can enhance or inhibit how the alliance unfolds and therefore affect its outcomes; and risk-related CSFs-factors that arise from the interdependent nature of alliances, which are often neglected in practice. Where aspects of these CSFs have been omitted from analysis during initial partner selection, alliance managers tell us of a litany of issues, challenges and failures that they have been forced to address, many of which might have been avoided altogether with greater diligence up front. We embed these four sets of criteria within a comprehensive partner selection framework and provide guidelines, examples and a specific methodology designed to help managers address the complexities involved in developing their own, unique partner selection criteria and processes.

Keywords: alliance partner selection, alliance management, alliance capabilities

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Strategic alliances have become more commonplace and significant in many industries as a way to access needed capabilities, gain knowledge and seek competitive advantage. Strategic alliance partner selection is a critical aspect of successful alliance development; even superior alliance management may not be sufficient to overcome poor initial partner screening and selection efforts. This paper presents a conceptual framework for effective partner selection. This framework will assist managers and academics by showing how the pieces of a partner-selection puzzle relate to each other and enable more effective partner-selection decisions. In addition, an analytical tool is presented in the appendix to illustrate how the strategic alliance partner selection framework can be applied.

The comprehensive partner selection framework presented in this paper includes new perspectives on and analyses of four critical alliance partner selection criteria, or "critical success factors" (CSFs). These four sets of criteria include the following: task-related CSFs—factors that facilitate or inhibit the successful completion of desired alliance objectives; learning-related CSFs—critical, desired attributes in potential alliance partners that enhance learning outcomes; partnering-related CSFs—relational factors that can enhance or inhibit how the alliance unfolds and therefore affect its outcomes; and risk-related CSFs—factors that arise from the interdependent nature of alliances, which often are neglected in practice. We embed these four sets of criteria within a comprehensive partner selection framework and provide guidelines, examples and a specific methodology designed to help managers address the complexities involved in developing their own, unique partner-selection criteria and processes.

Methodology. We drew upon three major resources in developing the comprehensive alliance partner selection framework, its components and the analytical tool presented in the appendix. First, we conducted an extensive review of the academic research on strategic alliances, with a particular focus on past alliance partner selection research. We found that the vast majority of the past partner selection research tended to focus on general motivational reasons for selecting partners, used static analyses and did not fully include important critical success factors. Second, we reviewed the professional literature as well as the academic literature that focused on practical examples of alliance partner selection objectives and strategies. Third, we had an opportunity to test, refine and improve the framework and analytical tool by working with more than two hundred strategic alliance managers and business executives at numerous companies in several forums and through several iterations.¹ Examples are provided from one such firm, a medical products company, to illustrate concepts presented in this paper.

Structure of this paper. We begin by discussing prior strategic alliance and partner selection research and identifying the gaps that this paper addresses. Next, we present the conceptual comprehensive alliance partner selection framework and analyze each of the four categories of critical success factors incorporated into the framework. While some CSFs are relevant for both initial partner selection and ongoing alliance management activities, the CSFs we focus on are the ones particularly important at the partner selection stage. In this analysis, we first put forth task-related CSFs in making appropriate partner selections and explore and differentiate the types of task-related CSFs to help guide executives in alliance partner selection. Next, drawing on our empirical research on knowledge transfer, we present learning-related CSFs, which, to varying degrees, should be a part of almost all alliance partner selection analyses. Third, we focus on partnering-related CSFs, drawn from the literature related to multiple alliance forms, to provide

a comprehensive, generic set of partnering-related CSFs and related guiding questions that executives can use to evaluate potential partners. Fourth, we incorporate specific risk-related CSFs that scholars have identified as important factors but practitioners suggest are frequently neglected in initial partner selection analyses—and that they are then left to address.

Alliance Partner Selection Literature and Traditional Approaches

Alliance partner assessment and selection are important considerations for executives making alliance partner decisions and have received increased attention in the alliance literature. Prior research has pointed to the critical importance of partner selection to a successful alliance. Historically, alliance partner selection research has been heavily focused on the general motivations for forming alliances. Brouthers et al. (1995) identified four general motivations as criteria for evaluating alliances: complementary skills, cooperative skills, compatible goals and commensurate levels of risk focused on asymmetric transfer of information or competencies. Doz and Hamel (1998) identified three primary alliance formation motivations: co-opting potential rivals and complementary firms, achieving co-specialization by combining complementary resources and learning and internalizing valuable skills. Child and Faulkner (1998) grouped alliance motivations, strategic-positioning motivations, learning motivations and other motivations. Bierly and Gallagher (1997) focused on the role that intuitive feeling about trust plays compared to a rational approach to alliance partner selection.

In some cases, the prior partner selection literature has parsed the general motivations for forming alliances into task-related criteria and partner-related criteria. Geringer (1991) introduced the notion of task-related motives, while Glaister (1996) added partner-related considerations. Das and He (2006) summarize the prior alliance partner selection literature as containing the following criteria:

- "Task-related criteria—complementary products or skills; financial resources; technology capabilities or uniqueness; location; marketing or distribution systems, or established customer base; reputation and image; managerial capabilities; government relationship, including regulatory requirements and government sales; help in faster entry into the target market; and industry attractiveness.
- Partner-related criteria—strategic fit or interdependence, or compatible goals; compatible or cooperative culture and ethics; prior ties and successful prior association; trust between top managers; strong commitment; similar status, including size and structure; reciprocal relationship; commensurate risk; and ease of communication."

Prior research has also focused on alliance learning and often subsumes learning issues within task-related CSFs (Simonin, 1997; Kumar and Nti, 1998; Bresman et al., 1999). In contrast, this paper analyzes learning-related CSFs as a separate CSF category, expressly including learning considerations in all partner selection evaluations. Furthermore, while risk factors have been considered in prior strategic alliance partner selection research (Das and Teng, 1998; de Man and Roijakkers, 2009), most of the prior research has focused on risk factors within task-related and/or partner-related critical success factors. For example, Ireland et al. (2002) noted the importance of performance-risk and relational-risk assessments in partner selection. In practice, risk considerations by managers do not generally receive sufficient consideration; such considerations are overshadowed by task and partner issues. When risk considerations are embedded within these

two CSF sub-categories, the interrelationships and interdependencies of risk considerations may tend to become lost and not receive full consideration. This paper breaks out risk-related CSFs into a separate CSF category to assist managers/companies in developing more comprehensive risk assessments and assumptions to better evaluate potential alliance partners. Indeed, as we have noted in prior research, making assumptions explicit is extremely valuable in decision making and proves to be one of the key contributions of adopting a comprehensive partner assessment approach that requires such explanations (Holmberg and Cummings, 2009). Alliance partner selection is critical to successful alliances and firm alliance capabilities play a significant role in both alliance partner selection and effective alliance management (Sleuwaegen et al., 2003; Hoffmann, 2005; Draulans et al., 2003; Lorenzoni and Baden-Fuller, 1995; Lei and Slocum, Jr., 1991 and 1992)

The vast majority of the prior alliance partner selection research has also been framed in static analysis terms. In a departure from this trend, Geringer (1991) conceptually identified that CSFs will change over time and that partner evaluation should consider those changes. Indeed, a frequent critique leveled by practicing alliance managers is that their firms' partner selection processes fail to consider potential partners' abilities to respond to contingencies. However, as with Geringer's (1991) work (also see Draulans, et al, 2003), where past alliance research has included dynamic considerations, it has been at a conceptual level, without an attempt to operationalize this dynamism into the partner selection criteria or CSFs. This paper extends the concept that all CSF considerations should be dynamic by adding a dynamic analytical tool in the appendix that provides managers with a method to operationalize these dynamic considerations.

Consistent with prior alliance partner selection research, a traditional partner selection framework (illustrated in Figure 1) shows a decision flow from corporate objectives, derived from assessment of the environmental conditions facing the firm, to alliance objectives, which are the key outcomes sought from an alliance, and then to task- and partnering-related CSFs, which will be used to develop specific selection criteria against which to evaluate potential alliance partners. More recent alliance partner selection research suggests that conceptual modifications to the traditional framework include the following: (a) the benefits of embedding partner selection within a strategic management-based process; (b) how to avoid relying only on trust, acting with strategic expediency or impulsively pursuing general motivations in selecting partners; (c) a focus on specific task- and partnering-related criteria; and (d) the consideration of CSFs in a manner whereby they can be evaluated dynamically over time and linked to both current and future alliance objectives and strategies.

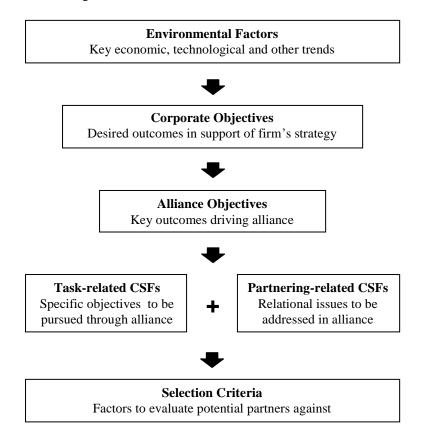


Figure 1. Traditional alliance partner selection framework

A more robust alliance partner selection framework

This paper fills several important gaps in the existing partner selection literature. First, it lays out a new conceptual alliance partner selection framework that consists of a number of elements that have not been fully incorporated in past approaches. Second, this paper presents a dynamic partner selection analytical tool, described in the appendix. Finally, this paper incorporates supporting examples from the literature and from our personal experience with over two hundred practicing alliance managers and a number of companies, including AES, a medical products company.

While research has explored many of the pieces of the partner-selection puzzle individually or in some combinations, we seek in this paper to bring the most relevant pieces together to add to the literature and help practitioners enhance their partner selection processes. We have found from direct experience working with executives that partner selection decisions need to be, and in fact are, more nuanced than the top-down approach suggested by Figure 1. Indeed, both executives and recent alliance literature support the view that the selection process is more akin to a puzzle-solving activity, with multiple aspects changing over time that need to be incorporated into the analysis. This paper's new comprehensive alliance partner selection framework balances partner selection tradeoffs and adds new dimensions within that framework to make the partner selection process more robust. Comprehensive alliance partner selection framework. This paper's robust, comprehensive conceptual partner selection framework (as seen in Figure 2) not only incorporates the elements shown in Figure 1 but also does so in a manner that allows a firm to balance several potentially interacting factors. In particular, in addition to deriving alliance objectives from corporate objectives consistent with environmental conditions (the bottom pyramid), the framework adds specific alliance objectives that translate into partner selection factors. The "best fit" approach that we adopt adds to the literature by balancing the different needs that any partnering firm has with respect to (a) the specific tasks that the alliance hopes to accomplish, (b) the learning aspects that accompany alliances, (c) the relational issues that are likely to present themselves during the alliance, (d) any potential risks that need to be mitigated and (e) the dynamic aspects of how these different factors interact over time. While most past alliance partner selection research has focused on task and partner criteria and/or subsumed learning and risk factors within them, we specifically add learning and risk as partner selection CSF categories to help executives focus on learning and risk in a broader and more comprehensive manner. A range of partnering risks is considered as well as the potentially significant risks embedded in a decision not to partner at all. Critical questions that executives need to ask in assessing potential alliance partners are developed for each of the four CSF categories in the alliance partner selection framework.

We stack the risk and partnering factors in Figure 2 against task-focused factors because research has shown that, in practice, managers often jump directly to task-related objectives, instead of giving due consideration to risk and partnering ones. This tendency potentially tilts the balance of the decision-making puzzle too far in the direction of task objectives. In addition, we include learning factors to highlight how learning-specific factors, or knowledge transfer, need to be considered in all alliance partner selection analysis.

Dynamic partner selection analysis. Past alliance partner selection research has focused predominately on static alliance partner selection analysis. This paper adds a dynamic element to alliance partner selection by suggesting a dynamic lens be applied, as indicated by the interaction arrows in Figure 2. This is important because we know that in most alliances, similar to the logic applied when firms internationalize, success factors change over time (Johanson and Vahlne, 1977). The use of a dynamic lens introduces a potential confluence of initial partner selection and subsequent partner management issues. However, consistent with our view that even superior alliance management may not be sufficient to overcome poor initial partner screening and selection efforts, our aim is to enhance partner selection by helping executives understand many of the key alliance partner selection factors that can be assessed up front. In fact, the most frequent response from the alliance managers we have worked with, when asked what might have been the outcome had more appropriate CSFs been better/further considered up front, has been some version of "select a different partner." To help alliance managers avoid such inevitabilities, we include dynamic partner selection elements in the analytical partner selection matrix presented in the appendix.

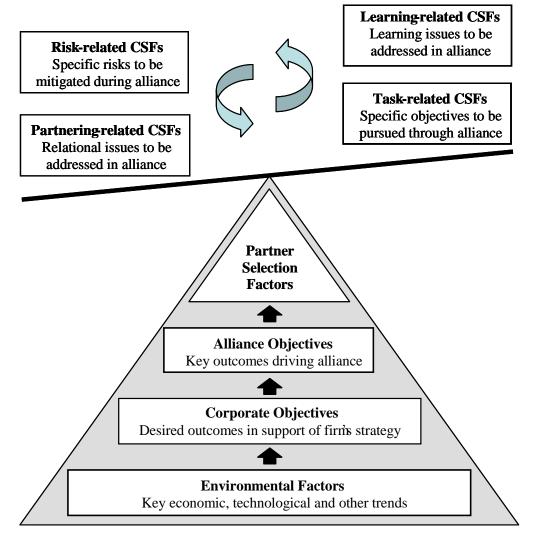


Figure 2. Balancing key factors in a comprehensive alliance partner selection framework

Altogether, by fleshing out and providing an organizing framework for sets of task-, learning -, partnering- and risk-related CSFs our framework can be used to enhance partner selection processes and improve alliance managers' selection outcomes. Within the four CSF sections that follow, we include examples from AES, a durable medical products company, that explore this company's decision processes and the complexities involved in developing appropriate alliance partner selection criteria. Importantly, our aim in considering each type of CSF is to help executives recognize how various aspects of alliance operations may be shaped by factors that can and should be evaluated pre-alliance formation, such that they can avoid finding themselves with an incongruent alliance partner due to a selection process that is not robust.

Task-related CSFs

Although strategic alliances come in many configurations, they typically involve two or more individual firms that agree to share control and responsibility over, and make continuing contributions to, a joint project from which one or more of the partners derive strategic advantage, as drawn from alliance definitions in the literature (Yoshino and Rangan, 1995; Morris and Hergert, 1987; Hamilton, 1990 and 1993; Varadarajan and Cunningham, 1995). Task-related CSFs refer to the specific tasks that an alliance would be formed to accomplish. In a successful alliance, one would expect the parties to achieve significant congruence or fit between their respective task-related CSFs (as well as other CSFs) and, therefore, be able to more fully accomplish their joint alliance and individual corporate objectives (Ring and Van de Ven, 1994; Inkpen and Ross, 2001). The most common form of alliance, frequently identified as a "resource-sharing alliance," focuses on obtaining complementary resources. In this section, we draw on various literatures to flesh out the types of task-related CSFs in such alliances, providing illustrative examples as we proceed.

Firms frequently form alliances because of real or perceived higher costs, risks and delays of internal development, mergers and acquisitions (M&A) and other non-collaboration-based strategies. Resource-sharing alliances may be formed to fill resource gaps, strengthen a market position, develop technologies, expand or enter new markets, strengthen customer positions and relationships or conduct joint production. A number of strategic advantages can arise from resource-sharing alliances. First, firms can gain synergy advantages from blending partnering firms' complementary resources and capabilities. In global markets, synergy can help a firm build a critical mass, reach new markets and fill skill gaps, allowing it to build powerful, central positions in key coalitions, create new opportunities and build new competencies (Doz and Hamel, 1998). Das and Hamel (1998) note that another advantage is the partnering firms' ability to achieve greater specialization than either might be capable of individually, as each partner can continue specializing in its own particular business aspects rather than attempting to master and manage several business aspects while developing all of the necessary resources and capabilities itself. Third, collaborations facilitate accessing new capabilities without making irreversible sunk-cost investments and without facing as many inertial constraints against change, such as administrative heritage, blind spots and focusing forces-often referred to as the "Not-Invented-Here" syndrome-that are inherent in firms seeking to develop their own new capabilities. Several authors have focused on factors that may inhibit a firm's ability to perceive events, environmental shifts and trends, as shown by (Bartlett and Ghoshal, 1989; Zajac and Bazerman, 1991; Teece et al., 1997). Lastly, as alliance managers frequently noted, effective collaborations can increase the speed with which the partners can accomplish various objectives.

While not necessarily exhaustive, these four general categories of task-related CSFs serve as the primary categories that apply to most alliances. Because a resource-sharing alliance's viability will be driven by how well a selected partner supports the focal firm's strategy and needs, given its industry and technological environment, the derivation of specific task-related CSFs comes about through identification of an appropriate set of challenges or opportunities and related tasks that the focal firm's alliance(s) seek to address (Ring and Van de Ven, 1994). A number of questions, vetted by practicing alliance managers and organized by the four major categories of task-related CSFs (bolded in the text above), are provided in Table 1 for use by executives in identifying appropriate task-related issues and then evaluating potential resource-sharing partners. Thus, consistent with Figure 2, the key step here involves analyzing the firm's strategy and broader environmental context to develop a list of tasks that best allow the focal firm to accomplish its alliance objectives. This task list is then used to assess how well each potential partner addresses each identified task. This same approach applies equally well to small, entrepreneurial firms and large multinationals. Both small and large firms have used alliances as a foreign market entry strategy (Anderson and Gatignon, 1986; Kim and Hwang, 1992; Killing, 1982). Consider the example of U.S.-based AES, a small durable medical products company.

Task-related CSFs	Sample Questions
What do we seek to accomplish?	To what extent is the potential partner firm favorably disposed to and capable of working with us to:
Gain synergy advantages	build critical mass?
	build powerful, central positions in key coalitions?
	build new competencies and synergies?
Achieve greater specialization	leverage each other's assets and revenue streams?
	reduce internal constraints to achieving new capabilities?
Access new capabilities	fill resource gaps?
-	strengthen market positions?
	develop technologies?
	expand or enter new markets?
	strengthen customer positions and relationships?
	conduct joint production?
	acquire new customers together?
	assess capabilities and any remedy deficiencies in pricing, marketing, production and other areas?
Increase speed	do any of above with increased speed?

Table 1. Task-related CSFs

When the company sought to enter the European market with its products, its major taskrelated challenges focused on reducing market entry costs and delays, obtaining access to a comprehensive distribution system and local brands and achieving compliance with emerging market standards. These became the criteria against which they would assess potential partners. To provide a solid fit with AES, the company sought an alliance partner that possessed some combination of resources and capabilities to effectively address each of these challenges (in the context of Table 1, the company sought potential partners who could help it "enter new markets," "fill skill gaps" and "leverage [a partner's] assets" related to market standards).² Additional taskrelated CSFs for AES are developed and illustrated in the appendix.

Alternatively, when France Telecom, a large multinational firm, became active in Argentina in the 1990s, it recognized that it needed to leverage certain financial capabilities, local knowledge and specialized skills to succeed. Rather than seeking to acquire or develop these capacities itself, the company instead identified appropriate task-related CSFs that would address its most pressing challenges and then used alliances to achieve greater specialization by accessing J. P. Morgan's financial engineering, Perez Companc Groups' local expertise and the Italian firm STET's complementary experience and skills (Doz and Hamel, 1998).

As a third and broader example, consider the online travel industry. According to one industry analysis, one of the most important corporate objectives for most firms is increasing their operational cost-effectiveness. However, as more travel purchases are made online, it has become increasingly important to address consumer privacy and security concerns regarding online purchasing, without which it may be very difficult for firms to achieve desired operational economies of scale (Willmott, 2000). Thus, an appropriate alliance objective that supports the corporate-level efficiency objective across this industry may be one focused on accessing new capabilities to address consumer security and privacy concerns. Some related specific partner

selection criteria might include the potential partners' use of certain encryption technologies, payment processing security protocols or something similar.

In each case, these examples illustrate that any given alliance will likely have different sets of task-related CSFs, according to which alternative partners can be assessed, depending on the focal firm's industry and context. Thus, as suggested above and depicted in Figure 2, task-related CSFs are best derived through evaluation of the focal firm's key opportunities and challenges, ideally based on an assessment of the firm's corporate and alliance strategies and its external environment. Importantly, where such assessments are lacking or incomplete, alliance managers tell us that all sorts of issues and difficulties arise in later alliance operations, often slowing times to market or causing firms to miss out on scalability options among other outcomes.

In addition to the certain task objectives in alliance formation assessments, most alliances also involve some degree of learning between partners as an important element in their design. Indeed, even when learning elements are not explicitly addressed in alliance designs, significant learning activities typically accompany most partnering interactions—whether they are as basic as getting to know counterparties socially or figuring out how to bring disparate systems together to support alliance objectives. As such, we focus in the next section on analyzing learning-related CSFs and highlighting several important nuances specific to alliance learning considerations.

Learning-related CSFs

This paper's new comprehensive alliance partner selection framework adds learningrelated CSFs as a consideration in all alliance partner selection decisions. A continuum of learning dimensions (from very minimal to very significant) exists for firms, depending on the industry and company context. In many industries, the pace of change is too great for any one firm to stay on top of important R&D, technology, customer, foreign market and distribution developments at the same time (Argote, 2000; Gupta and Govindarajan, 1991; Heimeriks, 2010). In addition, the breadth of such developments may make the use of resource-sharing alliances as a coping mechanism too costly, cumbersome or constraining. In such situations, and for other strategic reasons, firms often seek to obtain needed knowledge from other firms through learning via alliances.³ In other situations, while learning-related CSFs will play a small role in the overall assessment, they will nonetheless, in all likelihood, play at least a minimal role in shaping how interactions unfold between alliance partners.

At first blush, identifying learning-related CSFs is the same process as identifying taskrelated CSFs: the firm simply derives its key opportunities and challenges based on an assessment of its corporate and alliance strategies, as described above. What sets learning-related CSFs in alliances apart from task-related CSFs, and therefore requires assessment of several additional factors, is that the focal firm is typically granted a learning opportunity rather than direct access to or use of what an alliance partner can or may offer (Cummings and Teng, 2006). For example, consider an online travel firm that has determined it needs to gain access to encryption technologies for its travel-booking operations to accomplish one or more of its corporate objectives. Accordingly, the firm pursues an alliance through which it is provided with an encryption technology owner's services and/or it seeks to learn how the encryption technology works, with the aim of developing its own capability. While gaining access to the needed encryption services is likely to work out fine for the firm (assuming an appropriate task-assessment has occurred), learning how the encryption technology works might be more expensive and time-consuming. This distinction is important because knowing that a potential partner possesses certain specific knowledge is not sufficient to ensure the successful transfer of that knowledge to the focal firm or to ensure the focal firm's successful learning of this knowledge for its own future use. The possession of valuable knowledge, while necessary, is not sufficient to ensure acquisition or sharing of the knowledge, and in many alliances, organizations fail to acquire or share knowledge effectively. Research has found, for example, that managers may fail to adequately assess the knowledge needed for complete learning—even when they literally take ownership of the knowledge source. In one well-documented case, one company acquired another to learn about a certain higher-quality manufacturing process possessed by the second firm. While all the assets, equipment and related documents were acquired, the undocumented (i.e., tacit) knowledge about which essential routines to follow to achieve superior process outcomes was not transferred to the new firm, resulting in poor operational performance (Leonard-Barton, 1995). In other cases, a recipient may not be able to understand, absorb or relate to the new knowledge, such as where there is too significant a knowledge gap between the parties (Hamel, 1991; Inkpen, 1996; Lane and Lubatkin, 1998).

Based on a synthesis of the knowledge-transfer literature, a more complete learning-related partner assessment involves not only an evaluation of the extent of a potential partner's specific knowledge but also several other aspects related to how readily a partner is able to make its knowledge accessible. In alliance partner assessments, three broad learning-related CSFs deserve consideration. First, the alliance must provide the focal firm with the ability to locate the certain, specific knowledge it identified as necessary to support its corporate and alliance objectives (in the online travel industry example above, access to the desired encryption technology). Next, once in operation, the alliance partners must be able to obtain the needed knowledge in a timely and efficient manner by overcoming knowledge-embeddedness issues, effectively sharing both explicit and tacit knowledge and leveraging each other's related knowledge networks. Third, while not always relevant, often an alliance should also provide the partners with improved strategic soothsaying, forecasting and research inputs and capabilities. An additional potential CSF, related to assessing sharing or absorptive capacities, will be highlighted with respect to the partnership-related CSFs discussed later in the paper. Importantly, the idea here is to evaluatebefore any alliances are formed—how well an alliance with a specific potential partner is likely to be able to address these learning-related CSFs. This is akin to how potential new employees are evaluated in the selection stage regarding attributes that would only become manifest once the person is actually hired. While several of the factors only come into play once an alliance is ongoing, each may be (and often should be) assessed pre-alliance formation to enhance the process of partner selection. Indeed, in our exchanges with alliance managers, they frequently lamented the inability of selected partners to perform needed knowledge-sharing activities, such as segmenting joint customer files or forecasting sales, any of which could have been addressed more effectively had potential partners' learning capabilities been properly evaluated during the selection process. Table 2 provides a number of questions for use by executives in evaluating the three broad learning CSFs in potential partners (bolded in the text above). While the first and third CSFs are straightforward, the questions related to obtaining knowledge in a timely and effective manner merit further discussion.

Overcoming knowledge-embeddedness issues. "Knowledge embeddedness" refers to the extent to which knowledge is held within an organization's routines, systems and social networks. For example, it has been argued that few have been able to replicate Sony's miniaturization capability because this knowledge is so deeply embedded in different aspects of that firm's human and

physical assets and organizational routines (Prahalad, 1993). Recent research has found that the more deeply knowledge is embedded; the more difficult it is to transfer (Cummings, 2003). From a practical standpoint, this suggests that managers can benefit from assessing knowledge embeddedness when developing both pre-transfer knowledge preparation processes and overall knowledge transfer plans (Garud and Nayyar, 1994). Because research has shown that a failure to understand where knowledge resides can detract from the ultimate success of any related knowledge-sharing effort, a crucial learning-related question involves asking to what degree embeddedness issues can be overcome. Fundamentally, the greater the extent to which the knowledge "locations" (within the organization's routines, systems and social networks) can be readily identified and mapped out, the higher the likelihood of a successful knowledge transfer and, therefore, a successful learning outcome.

Table 2. Learning-related CSFs

Learning-related CSFs	Sample Questions			
What do we seek to accomplish?	To what extent is the potential partner firm favorably disposed to and capable of working with us to:			
Locate certain, specialized knowledge	identify their possession of the desired knowledge?			
Obtain knowledge in a timely and efficient manner	overcome knowledge embeddedness issues? share both explicit and tacit knowledge? leverage their knowledge network?			
Improve knowledge soothsaying, forecasting and research	 provide desired knowledge on evolving and future developments in R&D, technologies, customers, foreign markets, distribution areas, etc.? devise means and methods to generate accurate sales, revenue, R&D and other forecasts? engage in required customer file sharing, segmentation analyses and other research and planning activities? 			

Sharing both explicit and tacit knowledge. The next learning-related question relates to the tacitness of the knowledge to be learned. Tacitness refers to the extent to which knowledge can be verbalized, written, drawn or otherwise articulated. Knowledge that is non-verbalized, intuitive, unarticulated and deeply rooted in action is highly tacit and therefore harder to learn than knowledge that is more explicitly codified within a firm's formal procedures. Tacit knowledge is also hard to communicate, as it often is expressed through the ways that things are accomplished within a company—each company's unique version of "the way we do things here" (Spender, 1996). Research has shown that highly tacit knowledge is associated with greater causal ambiguity, which means that understanding such knowledge will be all the more difficult (Lippman and Rumelt, 1982). A potential partner with similar but more codified knowledge might make for a better learning partner than one with a high degree of tacit knowledge. Thus, a critical learning-related question is to what extent a potential partner is able to share both explicit and tacit knowledge, depending upon the form of the knowledge sought.

Leveraging the potential partner's knowledge network. According to Teece (2000), knowledge is often embedded in "clusters of individuals with established patterns of working together." This is

important because research indicates that the ability to put knowledge into action increases when group members become informed, often through training, of other members' expertise and when there are fewer departures or turnovers among group members (Stasser et al, 1995; Wegner, 2987; Moreland et al., 1996). In the context of learning dimensions in a partnership, a potential partner's willingness and ability to leverage an extensive network of employees involved with the focal knowledge has two positive outcomes. First, any staff turnovers are less likely to severely disrupt learning effort unfolds. From a pragmatic perspective, when there are more people who understand the relevant knowledge, there are more touch points from which to gather different points of view and perspectives on the knowledge, thereby enhancing learning. However, this only holds to the extent that the potential partner is willing and able to leverage this knowledge network. The last learning-related question here, therefore, is to what extent a potential partner is willing and able to leverage its knowledge network.

In combination with an analysis of task-related CSFs, the assessment of learning-related CSFs sheds further light on whether a given partner has the desired knowledge and is able to make it accessible in a form that will support the focal firm's learning. Thus, as demonstrated here, two key elements of potential partner assessments involve analysis of both task- and learning-related CSFs. In addition, as we discuss in the next section, because alliances are socially constructed partnerships between the parties, regardless of how well a potential partner meets the task- and learning-related needs of the focal company, the alliance may be doomed to poor performance if certain partnering-related attributes are not also present and evaluated as a core component of the partner selection process. Not surprisingly, alliance managers report that partnering issues—because they affect trust, personal relationships, expectations and a host of other aspects inherent in collaborative contexts—are of paramount importance to alliance outcomes.

Partnering-related CSFs

Whereas CSFs related to tasks and learning are used to assess how well a potential partner's resources and capabilities meet the focal firm's opportunities, challenges and needs, *partnering-related CSFs* focus on the most important relational aspects of firms in any form of alliance. Research has shown that successful alliances achieve high congruence on both task and partnering dimensions(Geringer, 1991; Aulakh et al., 1997). In this section, we draw on and discuss multiple streams of literature to provide an enhanced set of partnering-related CSFs that can be used to evaluate potential partners in almost any alliance. Partnering-related CSFs seek to capture the role that relationship factors can have on alliance outcomes (Geringer, 1991). Alliances represent socially constructed partnerships in which the various participants' interpretations and relationships shape the alliances' processes and outcomes. As a result, it is important to consider any factors that may have an effect on collaborative performance. Because an inappropriate partnering fit may doom the relationship from the start, identifying and analyzing appropriate partnering-related CSFs is essential.

While many partnering-related CSFs may only be fully known after the alliance is formed and the partners have worked together over some period of time, they still need to be fully considered prior to the alliance partner selection. A surprising amount of information and insight can be gleaned through a thorough, due-diligence-type partner-related CSF assessment. The alliance and collaboration literatures reveal numerous partnering factors to be considered, including differences in national and corporate cultures, past associations, strategic interests or intents and organizational norms and structures. These are but some of the relational factors that can affect how well collaborators work together and for further discussion see, for example (Ring and Van de Ven, 1994; Aulakh et al., 1997; Baughn et al., 1997). For example, research on R&D consortia formation found that the most successful consortia involved partners who had strong preexisting social relationships and strategic interdependencies because these attributes allowed them to develop the sorts of **shared goals and values** and **joint rules and norms** of behavior that facilitate quality working interactions (Ring and Van de Ven, 1994). Having strong **convergent interests** is also important because, as one researcher noted, "When circumstances place a great premium on effective articulation, remarkable things can sometimes be accomplished." This author was referencing how properly motivated individuals can be coached into performing tasks as complex as landing a plane via radio commands if the alternative outcome is crashing (Nelson and Winter, 1982).

Even if parties are positively disposed to work together in an alliance, difficulties often arise due to the challenges inherent in bridging differences in culture, experiences, trust, communication patterns, social systems and institutional structures as well as in implementing appropriate interaction processes and administrative systems. For further discussion of some of these difficulties in learning alliances, see (Glick and Manz, 2002; Dahan et al., 2010). Research has noted, for instance, that group members coordinate better when they share similar situational awareness of operational and cultural issues and realities. For example, Gersick & Hackman (1990) argued that "group interaction will unfold immediately in a well-coordinated fashion if (a) group members' scripts (Abelson, 1976) are similar to one another's and (b) members' definitions of the situation is also similar. In effect, the norm [routine] is imported and the absence of disagreement and miscues implicitly affirms that all members accept it" (Gersick and Hackman, 1990). In addition, administrative controls that institutionalize routine activities and facilitate new practices are said to affect not only the flows of assets and forms of interactions among parties but also the parties' incentives to collaborate. As one alliance manager commented to us, a lack of something even as basic as "setting correct expectations for timeliness of purchase orders and payments" can lead to conflicts and relationship issues that may ultimately negatively affect alliance operations and outcomes. In combination, these factors may determine what is acceptable and unacceptable in a workplace, which priorities are assigned to different tasks and types of interactions, whether high-quality working relationships are established between the parties and which coordinating mechanisms are used (Baughn et al., 1997; Geringer and Hebert, 1989; Gupta and Govindarajan, 1991; Kim and Hwang, 1992). These factors also help to determine how comfortable and trusting the partners feel toward one another and how easily they are able to work together. For further discussion of some of the organizational cultural complexities facing collaborators, see (O'Reilly and Chatman, 1996; Sarkar et al., 1999; Arino et al., 2001). While there are many reasons that alliances fail, chief among them may well be insufficient relational harmony between partners to overcome the persistent conflicts and opportunistic behaviors inherent in alliance settings (Dos and Kumar, 2009). There often are alliance issues that require partners to respond flexibility, and thus any excess rigidity or lack of relational harmony between the parties—for whatever reason—may prove problematic to the overall alliance.

At the same time, differences in capabilities between partners can also affect alliance outcomes. For example, it has been shown that organizational learning and resource-sharing outcomes can be positively affected if the partner firms have similar **knowledge-processing capacities** or "relative absorptive capacities" as well as similar learning capabilities (Lane and Lubatkin, 1998; Baughn et al., 1997). Research also indicates that the types of **personnel practices**

used to support alliance objectives can prove important. For example, job rotations, site visits, meetings and other activities that allow individuals to engage in what Polanyi termed "indwelling" have been found to enhance learning and allow for better communications among partners (Polanyi, 1966; Berry and Broadbent, 1984; Almeida, 1996; Galbraith, 1990; Hakanson and Nobel, 1998). Where partners possess different depths of personnel and varying comfort levels in using certain types of personnel practices and forms of interaction, challenges can arise in the relationship that negatively affect the alliance.

In terms of partnering-related CSFs, after considering their own knowledge and experience with prior partnering scenarios, AES executives identified a set of partnering-related CSFs they deemed most important to managing their market-entry alliance (note: AES did not consider learning-related CSFs in its analysis). These included the similarity of potential partners' organizational cultures to their own, each player's track record with regard to collaboration, the relative importance of the partnership to each potential partner and the perceived compatibility of the firms' senior management teams. After screening potential partners with respect to their task-related CSFs, the AES team then assessed the higher-ranking potential firms according to these partnering-related CSFs (see the appendix for an illustration of how to analyze CSFs). AES initially selected an alliance partner primarily based on task fit rather than partnering fit—and ignored learning fit altogether— reasoning that the business logic inherent in its planned expansion would allow the partners to overcome any potential relational conflicts that might arise.

Table 3 captures the major themes prevalent in the partnering research. Eight key criteria (bolded in the text above) form the basis for related questions that managers can use to evaluate potential partners regarding important partnering-related CSFs, despite the reality that complete information will not exist prior to partner selection and commencement of an alliance. Several of these questions are adapted from Cummings (2003) and Cummings and Teng (2003 and 2006). While initially derived to reflect key factors affecting knowledge transfers, the related concepts are equally applicable to other partnering contexts as well.

The results of AES's alliance partner assessment raise an interesting question: Which is more important, task fit or partnering fit? As with most questions of this nature, the answer is "it depends." Some firms, such as those more experienced with assorted partner types or who possess superior alliance-management resources and capabilities, might give less overall weight to partnering fit. In contrast, firms with less experience in those areas might give more overall weight to partnering fit. In AES's case, the firm pursued a partner with whom it could not only gain entry into the desired market but also then expand rapidly. The idea was that by achieving extensive market breadth, AES would be able to achieve sufficient distribution economies to allow it to compete very favorably on price in the new market. While its chosen partner was indeed a strong fit in terms of task-related CSFs, the partner firm had very different ideas about priorities and pace—elements of partnering fit that received scant attention in AES' assessment of potential partners, in part because partnering fit received little weight in its overall decision-making. Unfortunately, as AES soon realized, the term "rapidly" can mean different things to different management teams.

Partnering-related CSFs	Sample Questions
What issues do we need to address?	To what extent is the potential partner firm favorably disposed to and capable of working with us to:
Shared goals and values	develop, communicate and reinforce shared goals and values – define what success looks like at appropriate intervals by executive sponsors?
Joint rules and norms	support joint development of rules of conduct and norms of behavior between the parties?
Convergent interests	commit to formal co-marketing endorsements, margin stacking, ROI targets or other joint activities? overcome any limits or barriers, act to support operational interests and reset expectations when needed?
Situational awareness	facilitate each party's appreciation for the other's operational and cultural situation?
Administrative controls	put in place structures to address administrative and contractual differences?
Relational harmony	engage in relationship-building activities?
Knowledge-processing capacities	assess the relative resource-sharing/absorptive capacities of the parties and develop plans through which to help them achieve compatible capacities?
Personnel practices	manage appropriate combinations of personnel involved in the resource-sharing/learning arrangement?

Table 3. Partnering-related CSFs

Risk-related CSFs

In addition to the task, learning and partnering aspects of fit discussed above, an important fourth category of fit has to do with potential risks involved in the alliance context. We do not contend that the task-, learning-, partnering- and risk-related CSFs are mutually exclusive, as several aspects may fall into one or more domains. Rather, we seek to err on the side of being exhaustive because omission of any aspect might prove damaging to the alliance partner selection process.

This paper incorporates a separate risk-related CSF assessment as a part of the comprehensive partner selection framework. We have often found it useful to include two categories of what we term here *risk-related CSFs*. The first category is identified as "alliance risks" and includes those risk-related CSFs that stem from engaging in an alliance. The second category includes the risks to the focal firm that stem from potential alliance activities pursued by others; these are identified below as "not-partnering risks."

Alliance risks. In our work with executives, they routinely raise concerns about the risks involved in linking their firms' efforts to those of others, especially where there is minimal prior experience with the potential partners, markets or technologies. Alliances involve a myriad of risks with

implications for both partner selection and governance-structure selection decisions. **Performance risks**, the first of six major alliance risk categories derived from the literature, are common in alliances and can take various forms. For a more detailed discussion of the risks in collaborations, see (Das and Teng, 1998; Brouthers et al., 1995; Lei and Slocum, Jr., 1991: Inkpen and Ross, 2001) and for a discussion of the interplay between performance risk and relational risk, including whether they are complementary or substitutes, and the impacts on alliance governance structure see (de Man and N. Roijakkers, 2009).

At the outset, alliances may be created based on unrealistic performance goals derived from objectives and aspirations of the parties who are simply too anxious to "do the deal." As a result, they may suffer from the risk of unrealized savings and/or revenue growth. For example, alliance managers reported to us that false starts in performance can lead to "constant debate about the value of the alliance," which then "furthers the challenges inherent in re-establishing meaningful objectives and expectations." In addition, performance risks may take the form of higher subsequent investments as the alliance unfolds in ways not anticipated or not fully accounted for at the outset. Moreover, if an alliance fails or performs poorly, this information is often broadly disseminated, potentially hurting the standing of management within the companies as well as the firm's standing in the broader business community.

The second set of risks that alliances may encounter is that of **relational risks**. Relational risks may result from individual firm politics, unanticipated time and costs of increased coordination and poor alliance communication. For example, the parties may have to respond to unanticipated changes in the partner firms' strategies, which may be made all the more urgent if the parties are not coordinating their efforts effectively. Deteriorating relationships that quickly impact performance, as well as politics within one or both companies, further heighten these risks.

A third class of risks involves the likelihood that the alliance parties may not equally share the risks. These **unequally shared risks** often occur because many risks cannot be explicitly built in as part of the agreements between the parties. One of the major unequally shared risks involves asymmetric knowledge acquisition, where a partner acquires knowledge of the focal firm's core skills, but the knowledge transfer is not reciprocal. This can lead to a fourth major set of alliance risks, which involves emergent competition risks. Here, one of the alliance partners sets out to (or quickly develops a strategy to) "de-skill" the focal firm; that partner then dissolves the alliance and becomes a competitor. Similarly, unintended innovation spillovers often result in a focal firm's loss of its innovative edge. A fifth major category of risks, quality risks, may emerge from the lack of proper quality controls, including insufficient training and implementation strategies. Finally, a sixth set of risks relates to customer relationship risks. Where products or services are bundled to create a superior package or solution for the customers of both alliance partners, multiple, complex issues arise related to customer relationship management, sharing customer contacts/lists, customer sales calls and customer product/service problem solutions - all of which may expose firms to damage should these issues be poorly managed. Damaging customer relationships is a very serious alliance risk that can have long-term consequences for one or both alliance partners.

Table 4 captures many—but not all—of the risk-related CSFs to be considered by firms in their partner selection analysis and provides related questions for use in assessing alternative alliance partners. In addition to the six major categories of risks described and bolded in the text above, a final item is included in Table 4 to accommodate any additional risks unique to the partnerships at hand. As in the case of some specific partnering-related CSFs, some specific risk-related CSFs that need to be assessed prior to partner selection will be assessed with incomplete

information. Identifying the probability of those risks (or potential unknown uncertainties) and considering the potential impacts of those risks will be an important component of the alliance partner selection process, even with imperfect knowledge.

Risk-related CSFs	Sample Questions
What alliance risks do we need to address? Performance risks	To what extent does an alliance with the potential partner expose the focal firm to: unrealistically optimistic initial alliance performance goals based on factually and politically derived performance goals and metrics? unrealized revenue and/or profit performance? unrealized cost savings? higher subsequent alliance investments than accounted for or anticipated?
Relational risks	insufficient understanding about each other's businesses? individual firm politics? significant unanticipated time and costs of increased coordination? poor internal and cross-alliance communication? unanticipated changes in the other firms' strategies? additional responsiveness needs?
Unequally shared risks	unequal sharing of knowledge between firms? undesired sharing of proprietary knowledge about the firm's core skills?
Emergent competition risks	intentional "deskilling" of the firm? inadvertently helping to create a competitor? unintended innovation spillovers by the firm?
Quality risks	failures in establishing proper quality controls and metrics? failures in establishing systems to document and measure quality? insufficiencies in developing quality training and implementation systems?
Customer relationship risks	potential damage to customer relationships? ineffective customer relationship management? insufficient mechanisms to share customer contacts/lists? conflicting strategies for joint or separate customer sales calls? conflicting tactics to resolve customer product/service problems? uncoordinated strategies for continuous quality improvements?
Idiosyncratic risks	oOther risks unique to the particular situation?
What Not-partnering risks do we need to address? Lock-out potential partners	To what extent does NOT allying with the potential partner expose the focal firm to: being unable to partner with certain other key potential partners?
Loss prevention	being unable to mitigate any advantages of others' moves into new technology, market or concept areas?

Table 4. Risk-related CSFs

Not-partnering risks. In addition to all of the alliance-based risks, competitive-interaction risks also exist, which pertain to a firm facing collaborative actions by others in or near its current or potential business domain. For example, just as a focal firm may seek to undercut a rival's

strategies and market positions by establishing alliances with one or more of its competitors, customers or suppliers, it may also try to undercut its own competitors with direct allianceblocking strategies (Yoffie and Kwak, 2006). One increasingly popular collaborative form is an alliance pursued to disrupt a rival by **"locking out" partners** whose resources might prove essential to the rival's businesses or plans. A lockout alliance ties up a potential partner who has resources, capabilities or knowledge that might add significant value to a rival, thereby enabling a firm to potentially limit that rival's ability to lower costs, enhance product quality, pursue new markets or opportunities or even respond to the focal firm's actions. Moreover, by aggressively pursuing rival-blocking alliances, a firm can prevent its competitors from taking advantage of situations where early movers can gain access to complementary resources on favorable terms.

For example, a recent study found that locking out potential partners by identifying, selecting and attracting key creative collaborators before competitors is critical for companies in design-intensive industries (Del' Era and Verganti, 2010). Lockout alliances can also create entry or exit barriers for competitors. Recent research in Canada's biotechnology industry, for example, found that firms frequently pursued upstream and horizontal alliances to block rivals' access to key resources and partners as well as to impose stronger competition on certain rivals (Silverman and Baum, 2002).

In contrast to lockout-type, rival-blocking alliances, firms may also pursue **loss-prevention strategies**, essentially mirroring major competitors' conduct in their collaborative activities to avoid their own firms being locked out. By imitating their rivals, they hedge against a potential change in necessary resources or relationships, as signaled by a competitor's moves. Just as firms have been shown to bunch their international expansion activities in time and geography, they also do so with respect to alliances, creating a sort of bandwagon effect to minimize risks and reduce uncertainties. For a discussion of how firms follow each others' conduct, see (Park and Zhou, 2005; Yoffie, 1996; Schilling, 1998; Knickerbocker, 1973; Gomez-Casseres, 1996). These imitative alliance strategies can reduce any advantages that competitors might expect to gain by being the first to move into a new technology, market or concept area. In the airline industry, for example, when one major carrier announces a new route, service or hospitality partnership, others usually quickly follow such announcements by seeking similar collaborations of their own.

To develop non-partnering, risk-related CSFs, it is necessary to shift one's frame of reference and evaluate the CSFs of *rivals* rather than those of the focal firm (Fahey, 1999). In other words, the focal firm must identify its rivals' likely CSFs to obtain a sense of the risks that it may face should certain rivals pursue certain collaborative partners or partnering arrangements. After using these CSFs to identify its rivals' potential best-fit collaborators, the firm is able to assess the risks it faces from these rivals' actions and, by default, from its own potential inactions. Importantly, this type of analysis also enables the focal firm to better understand its rivals' collaborative activities and potentially preempt their strategic moves.

Firms have been attempting to analyze M&A scenarios in a similar manner for many decades. For example, before Verizon Communications Inc. acquired MCI, Inc., both Verizon and rival Qwest Communications International Ltd. had been analyzing similar deals for some time and thus were ready to act quickly upon the news of Sprint Corporation's acquisition of Nextel Communications, Inc. and SBC Communications Inc.'s subsequent agreement to acquire AT&T Corp (Noguchi et al., 2005). These deals may have been designed to provide complementary resources and/or strategic interaction benefits. Regardless, proactively analyzing M&A and collaborative targets appears to be critical to firms' success in many industries; the same proactive analysis of rival firms' potential alliance partnerships can serve a similar purpose. AES did not

consider risk in its partner selection process. Had it done so, relevant risks, as indicated in the appendix, may have been the following: reputational effects upon the alliance's failure; knowledge spillovers, as the company had several unprotected forms of intellectual property; and lock-out risks that might have prevented the firm from entering certain markets if others were to have partnered with the limited number of companies available.

Shift from Static to Dynamic Partner Selection CSF Analysis

Most prior alliance partner selection research has focused on static analysis of objectives and CSFs in analyzing alliance partner desirability and has also tended to emphasize task- and partnering-related CSFs. However, recent research on learning dimensions in alliances indicates that, at a minimum, all three categories of CSFs are important in alliance performance outcomes (Cummings and Teng, 2003). More specifically, a potential partner firm's ability to meet taskrelated CSFs might represent an initial required condition, while being able to address partneringand learning-related CSFs may provide the means by which the alliance partners can work together proactively to achieve objectives and potentially overcome any weaknesses with respect to task fits, either while an alliance is being formed or after it is in place (Draulans et al., 2003). Our research also suggests that the specific inclusion of learning- and risk-related CSFs is critical to successful partner selection analysis and decisions. Moreover, it is important to consider the evolutions of all of these CSFs over time, and—in particular—the role that partnering attributes can play in addressing any task-, learning- or risk-related CSF shortcomings.

The international alliance literature suggests the importance of dynamic elements, finding that as firms gain experience in foreign markets, they become less uncertain about how to operate in those markets and more willing to expand their commitments (Johanson and Vahlne, 1977). Similar changes undoubtedly occur with respect to many other aspects of an alliance relationship and not only in internationalization contexts. In other words, the CSFs used in assessing potential partners must accommodate likely changes in the planned alliance over time, including changes to the tasks that the respective firms seek to accomplish as well as their relational environment (Ring and Van de Ven, 1994; Nonaka, 1994). Indeed, when AES executives were pressed to address the importance of their different CSFs over time, they concluded that those deemed most important today (the task-related factors of access to distribution channels and local brand), would become relatively insignificant within a short time frame of three to six months, while supply chain management sophistication and strong host-government relations would prove critical to the firm's rapid expansion plans for the mid-term, once the firm obtained an initial foothold in the new market.

After thinking through their situation in a more dynamic, time-sensitive manner, AES identified the option of pursuing a short-term licensing arrangement with one partner and a longer-term distribution agreement with another partner that would be initiated after the licensing alliance showed some results. A key partnering-fit aspect for the longer-term distributor relationship would be the partner's willingness to rapidly fund modifications to its existing supply chain management system. Of course, this would require the partner to share AES's situational awareness and definition of "rapid" as well as require a better fit with respect to several other partnering-related attributes not initially considered by AES. Interestingly, not only was the shorter-term licensing approach that ultimately emerged for AES never considered in the initial analysis, due to a concern about brand dilution that went away with the new strategy, but also this type of strategic alliance sequencing—which strategic management experts maintain is an integral component in any

complete strategy—was also never considered in AES' initial foreign market-entry analysis (Hambrick and Frederickson, 2001).

Alliance Partner Selection Evaluation Decision Tool

Most alliance partner selection research has focused on generic or more specific motivations for partner selection or other issues and has not presented a tool for operationalizing the partner selection process. We have developed and include in the appendix an example of a straightforward, weighted decision matrix, tested in practice, which illustrates how to evaluate alternative partners according to several interacting elements (Holmberg and Cummings, 2009). From our perspective, a "best-fit" partner is one that provides the highest congruence with the factors deemed most relevant and important to the success of the alliance. Therefore, as illustrated in the sample matrix, a potential partner would be deemed a "best fit" if its total weighted average scores on the relevant task, learning, partnering and risk factors were to exceed those of other potential partners. Additionally, because many factors are more dynamic than they are static, the ultimate best-fit partner would be the one who provides the best fit over time as well (see appendix for further discussion). This paper's analytical tool is designed to facilitate a firm's ability to translate the balanced partner selection framework and its "best-fit" partner selection approach into action.

Conclusion

Many alliances will fail—some quickly, and some over a longer period. Even superior alliance management may not be sufficient to overcome poor initial partner screening and selection efforts. Because an inappropriate initial fit may doom a relationship from the start, it is essential to identify and analyze appropriate fit criteria, including task-, learning-, partner- and risk-related factors. Task-related critical success factors include the essential objectives that the alliance must help the firm achieve. Learning-related CSFs in alliances include desired learning outcomes as well as particular aspects of the learning process that also must be taken into consideration. Partnering-related CSFs take into account whether the degree of relational harmony between partners will be sufficient to overcome the persistent conflicts and opportunistic behaviors potentially inherent in alliance settings. Lastly, risk-related CSFs reach the heart of the concerns that are present in any situation where partners' vulnerabilities may be exposed. In essence, a good risk fit maintains an appropriate mix of risk identification, mitigation, reciprocity and forbearance. Moreover, because all of these criteria may change in importance or magnitude over time, dynamic CSF considerations are also incorporated as critical components of the partner selection framework.

For AES, our analysis suggests is that AES executives might have benefited from a more systematic evaluation of potential partners on the basis of task-, learning- and partnering-related CSFs, paying particular attention to being comprehensive with respect to learning- and partnering-related CSFs, in their decision given their roles in helping partners overcome managerial challenges that come with the blending of e.g., organizational cultures, norms, systems, people, processes and priorities. In addition, while risk factors were not included in the company's analysis, AES executives could have more fully analyzed potential pitfalls from their intended alliance efforts or, for that matter, from the purposeful adoption of a strategy not to partner with any outside firms, if they had included risk factors in their alliance partner selection efforts.

Taken together, the four categories of CSFs presented here, once suitably embedded in a comprehensive, dynamic, collaborative partner selection process, as depicted in Figure 2, provide a common set of attributes according to which managers can make more informed assessments of how well a range of potential partners might fit their firm's alliance needs. While the case of AES explored an international market entry strategy, the same evaluative process and framework apply just as well in other domestic and international contexts, for firms of various sizes and for firms in various stages of the industry and organizational life cycles, as is evident from the firms represented by the over two hundred alliance managers who have engaged with us in refining this framework.

Although the specific criteria to be assessed by the focal firm may change in importance or relevance depending on the firm's own dynamic context, the analytical methodology illustrated in the appendix can be applied flexibly across a range of situations. The framework simply calls for the identification of appropriate task-, learning-, partner- and risk-related CSFs, suitably derived from analysis of the firm's strategy and needs, and given its industry and environment, which are then balanced against one another to identify a partner who provides a best fit with the focal firm.

There is an important need for firms to utilize a more complete and systematic analysis in selecting alliance partners, which has been confirmed in our interactions with practicing alliance managers. This paper's new comprehensive partner selection framework and related analytical tool provide a new approach for practicing managers and academics that shows how the pieces of a partner selection puzzle relate to each other and how they can be used together to achieve more effective partner selection decisions.

Appendix

Figure 3 provides a simple matrix that can be used to evaluate two or more potential partners according to three types of fit (task, partnering and risk; learning CSFs are omitted for brevity). Many of the CSFs in Figure 3 are drawn from the previous AES example, while others reflect considerations that would have been useful for AES to include in its analysis. After identifying appropriate CSFs of each type, an importance weight is assigned to each CSF to reflect management's best judgment regarding the relative importance of each CSF to the accomplishment of the alliance's objectives. Next, two or more firms are rated with respect to how well they are likely disposed to and capable of working with the focal firm to address each CSF.

Figure 3. Illustrative best-fit partner selection matrix

			Rating (1-10)	
Task Fit	Task-related CSFs:	Relative importance	Firm A	Firm B
	Europe-wide distribution channels	40%	10	6
	Strong local brand	30%	7	6
	Strong host-government relations	15%	8	10
	Compatible SCM system	15%	5	9
	Task Fi	t*	8.1	7.1
Partnering Fit	Partnering-related CSFs:			
C	Similarity of organizational cultures	10%	8	6
	Collaboration track records	40%	7	9
	Importance of alliance to partner	15%	9	10
	Senior management compatibility	30%	5	8
	Partnering Fi	<u>t</u> *	6.5	8.1
Risk Fit	Risk-related CSFs:			
	Negative reputation if alliance fails	10%	5	5
	Spillover of proprietary knowledge	40%	9	2
	Likelihood of lock-out if not ally	50%	9	2
	Risk Fi	t*	8.6	2.3
Overall Fit	Task Fit	70%		
	Partnering Fit	15%		
	Risk Fit	15%	Firm A	Firm B
Overall Fit**			7.9	6.5

*weighted average of importance % x ratings

**weighted average of overall fit importance % x task/partnering/risk fit weighted averages

Note: Rating 1-10 assumes higher values are more positive

Learning CSFs are omitted in the example for the sake of brevity.

Of course, many managers might balk at putting such fine numbers on an often subjective and qualitative process. However, it proves useful to use some form of quantification (whether using 1-10 or 1-5 scales or some other metrics) and to force exposure and discussion of underlying assumptions regarding the relative importance of various CSFs and the likely performance of potential partners with respect to different CSFs. Such a matrix also provides a unifying mechanism through which management can bring together the many pieces of the partnerassessment puzzle.

As described in the main paper, **dynamic issues** related to the various best-fit factors also need to be addressed in a comprehensive partner assessment process. Figure 4, adapted from Holmberg and Cummings (2009), include a time factor with two uses. First, the relative importance of each CSF can be specified for a "current" vs. "future" time period. This allows for the calculation of a "current" score and a "future" score for each firm on each set of CSFs, as shown in the figure, which are rolled up into composite current and future scores based on the relative importance assigned to each set of CSFs. Second, the relative overall importance of each time period can be specified, allowing the current and future scores to be merged into one overall number to compare one firm to another. Taken together, these two modifications to the basic matrix allow for incorporation of the many dynamic changes likely to affect any partnership over time and thereby allow for inclusion of such factors in the best-fit analysis.

		Relative i	Relative importance		Rating (1-10)	
Task Fit	Task-related CSFs:	Current	Future	Firm A	Firm B	
	Europe-wide distribution channels	40%	10%	10	6	
	Strong local brand	30%	20%	7	6	
	Strong host-government relations	15%	40%	8	10	
	Compatible SCM system	15%	30%	5	9	
	Current Task Fi	it*	-	8.1	7.1	
	Future Task Fi	it*		7.1	8.5	
Doutu onin o Fit	Partnering-related CSFs:					
rarmering rit	Similarity of organizational cultures	10%	0%	8	6	
	Collaboration track records	40%	0%	8 7	9	
	Importance of alliance to partner	15%	50%	9	10	
	Senior management compatibility	30%	50%	5	8	
	Current Partnering Fi	/ -	5070	6.5	8.1	
	Future Partnering Fi			7.0	9.0	
					200	
Risk Fit	Risk-related CSFs:					
	Negative reputation if alliance fails	10%	0%	5	5	
	Spillover of proprietary knowledge	40%	100%	9	2	
	Likelihood of lock-out if fail to ally	50%	0%	9	2	
	Current Risk Fi	it*	-	8.6	2.3	
	Future Risk Fi	it*		9	2	
Dynamia Fit	Fit Importance: Task I	Tit 7()%			
Dynamic Fit	Partnering I					
	Risk l					
	Time Importance: Curre	nt 70)%			
	Futu	re 30)%			
				Firm A	Firm B	
	Dynamic Fit*	**		7.7	6.8	

Figure 4. Dynamic-fit alliance partner selection matrix

*Weighted average (WAV) of importance % x ratings by time period

***WAV of fit importance % x task/partnering/risk fit by time period x current/future % Note: Rating 1-10 assumes higher values are more positive

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Notes

¹ One of the authors has delivered several seminars to alliance managers, including at the national conference of the Association of Strategic Alliance Professionals and at IBM, as well as in several Executive MBA and MBA courses. In each case, the framework and tool were applied, and formative guidance was sought on how to make both more practical and effective. Qualitative surveys were completed with these groups, through which over two hundred participants were asked whether any critical success factors "should have been better/further considered at the selection stage" and "what might have been the outcome had this occurred." Responses across all four categories of CSFs provided a rich database of input to inform modifications to the framework as well as establish further validity in its use by practicing professionals. Any references within the paper on comments by alliance managers come from this database.

² This example was reported to one of the authors by the president of AES during the course of an Executive MBA business strategy course.

³ There is a difference between an alliance formed to leverage another firm's knowledge and a learning alliance. Whereas in the former the focal firm seeks to make use of some other firm's knowledge, in learning alliances the idea is that the focal firm seeks to acquire such knowledge from another firm. Thus, in the first case, a firm would be seeking to leverage another firm's marketing knowledge in a specific product market, for example, and in the second case, it would be seeking to gain this specific knowledge itself.