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The analytic network process for partner selection criteria in strategic alliances

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ABSTRACT

As world economic activities intensify and trade barriers fall, the formation of viable strategic alliances in the high-tech industry gains importance and accelerate of necessity. However, the selection of a suitable partner for strategic alliance is not an easy decision, involving a host of complex considerations. This paper proposes an integrated approach of analytic network process (ANP) to consider both tangible and intangible factors and to optimize the paid off earn by company from strategic alliance. The data was collected from top management teams (TMT) of LCD industry to evaluate criteria and sub-criteria for strategic alliance process. Based on ANP results, this study used a hypothetical problem in selecting strategic partners to demonstrate the results. The main contribution of this paper is that the complex business problems for strategic alliance are conceptualizing to help business practitioners.

1. Introduction

According to Drucker (1996), the biggest change in business field is the growing of partnership among companies around the world. Kalmbach Jr. and Roussel (1999) predict that within five years, strategic alliances will account for 16–25% of medium company value and 40% of the market value for about a quarter of the companies. This means that in five years, alliances will represent \$25–\$40 trillion in value. As 21st-century organizational systems evolve, one of the emergent themes is the relative importance of partnerships and strategic alliances. An increasing number of companies subscribe to the idea that developing long-term collaboration and cooperation, partnering, can take significant wastes out of the supply chain and provide a route to securing the best commercial advantage. So in this "co-opetition" era, competitive advantages rely not only on internal capability and resources, but also on close cooperation and solid relationships with external organizations (Claycomb & Frankwick, 2004; Kwon & Suh, 2004).

A firm's selection of an appropriate strategic alliance partner is a critical decision (Hitt, Tyler, Hardee, & Park, 1995). Partner selection determines a strategic alliance's mix of skills, knowledge, and resources, its operating policies and procedures, and its vulnerability to indigenous conditions, structures, and institutional changes (Child & Faulkner, 1998). Research to date has demonstrated that partner selection is a consciously strategic and specific decision in the creation of a strategic alliance, and that the importance and variation of the criteria used by a firm in selecting a partner are reflective of a wide range of factors, many of which derive from a firm's needs (Dacin, Hitt, & Levitas, 1997; Hitt, Dacin, Levitas, Arregle, & Borza, 2000).

Yet, partner selection is an essential factor influencing the performance of alliances (Ariño & de la Torre, 1998; Ireland, Hitt, & Vaidyanath, 2002). Also, alliances can be sources competitive advantage (Dyer & Singh, 1998) and may "shift the very basis of competition to a new level – from firm vs. firm to (...) rival groupings of collaborators" (Powell, 1987), which means that the performance of a firm is intimately tied to the performance of its collaborative engagements (Dyer & Nobeoka, 2000). Strategic alliances are partnerships of two or more corporations or business units that work together to achieve strategically significant objectives that are mutually beneficial. The potential of strategic alliances strategy is enormous. If implemented correctly, some authors claim it can dramatically improve an organization's operations and competitiveness (Brucellaria, 1997).

Theory on partner selection in interfirm collaborations remains in general weak and more research is required to make it relevant for managers in particular contexts (Chung, Singh, & Lee, 2000; Hitt et al., 2000). Jones, Hesterly, Fladmoe-Lindquist, and Borgatti (1998) argue that we need more understanding of how alliance partners are chosen in multiparty collaborations among other issues in terms of "the criteria these selections are based upon." Reuer (1999) suggests that deriving value from strategic alliances "...requires companies to select the right partners, develop a suitable alliance design, adapt the relationship as needed and manage

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the endgame appropriately." Firms must identify and develop alliances with partners that have critical complementary resources (Harrison, Hitt, Hoskisson, & Ireland, 2001). Strategic alliances can be valuable for firms in emerging markets because of the assets that partners bring to the relationship (Hitt et al., 2000). According to the Coopers (1997) study, 50% of firms involved in alliances market their goods and services internationally versus 30% of nonallied participants.

Access to resources and capabilities from partners may be especially valuable to firms in countries undergoing transition to market economies (Zahra, Ireland, Gutierrez, & Hitt, 2000). Technology transfer is not only viewed as being significant to the success of a strategic alliance, according to Hsieh (1997): "host countries now demand more in the way of technology transfer". As evidence of this growing trend, Hsieh cites China as a prime example. Gaining access to technology is important to TFT-LCD industry because it takes a long time to internally develop the know-how to create new technology and use it independently (Schilling, 1998). To be competitive, these firms need to gain access to and learn the necessary technological knowledge; armed with this knowledge, the firms can become more entrepreneurial (Filatotchev, Wright Buck, & Zhukov, 2000; Liu, Dubinsky, & Shi, 2000).

Strategic alliances strategy has been prescribed as an important tool for attaining and maintaining a competitive advantage. In addition, strategic alliances concept is growing in appeal to organizations because of the cost savings achieved in executing operations. Indeed, many companies are forming alliances looking for the best quality or technology or the cheapest labor or production costs. Strategic alliances partners should be selected based on their expertise in the operation and their cultural fit with the firm. The key question of this paper is how firms should select alliance partners for entering competitive advantage. These are the motivating questions behind this research.

2. Literature review

2.1. Strategic alliances

Strategic alliances continue to grow in popularity (Dyer, Kale, & Singh, 2001), and recent years have witnessed a burgeoning interest in functions and advantages of strategic alliance formation. Research on strategic alliances has posited theories addressing the reasons why firm enter into closer business relationship. Following social network theory (Ahuja, 2000; Gulati, 1999; Kenis & Knoke, 2002), this study asserts the argument of Granovetter's (1985) that many studies apply static efficiency theories in terms of "undersocialializing" the partner selection aspect. Gulati (1995) finds that prior alliances create ties that directly and indirectly influence the choice of partners. Similarly, Gulati and Gargiulo (1999) find that the probability of a new alliance between two specific firms increases with their interdependence, their prior ties, common third parties and their centrality in the alliance network. Li and Rowley (2002) find that in addition to different evaluation criteria, inertia plays an important role in partner selection. Gulati (1995), Gulati and Gargiulo (1999) and Li and Rowley (2002) focus on intra-industry alliances.

This study addresses partner selection which will affects the mix of resources and capabilities available to the alliance. Yet, it is not necessarily the critically of resources (Barney, 1991) that determines the attractiveness of a partner. Spekman (1988) claims that selection of a good partner heavily depends on goal congruence between partners. Taking the argument further Hamel, Doz, and Prahalad (1989) argue that when seeking collaborators for technology-related projects, firms should seek partners whose strategic goals converge, while their competitive goals diverge. Koza and Lewin (2000) argue that on of the most common reason for alliances to fail is lack of recognition of the close interplay between the overall strategy of the firm and the role of an alliance in that strategy.

2.2. Partner selection

Partnerships are defined as purposive strategic relationships between independent firms who share compatible goals, strive for mutual benefit, and acknowledge a high level of mutual interdependence. The formation of these alliances and partnerships is motivated primarily to gain competitive advantage in the marketplace (Bleeke & Ernst, 1991; Powell, 1990). This study asserts that partnership selection is perhaps the most important step in creating a successful partnership (Chen & Tseng, 2005; Elmuti & Kathawala, 2001).

2.3. Partner selection criteria

In the early 1950s, in one of the first attempts to specify a set of selection criteria for choosing channel members, Brendel (1951) developed a list of 20 key questions for industrial firms to ask of their prospective channel members. Many of these questions are relevant for consumer products firms as well. Brendel's list of selection criteria, which has become a classic in the marketing channels literature, is as relevant today as it ever was. One of the earliest lists of channel member selection criteria was offered three decades ago by Pegram (1965) and broader range of firms. Pegram divides criteria into a number of categories. The criteria include: credit and financial condition, sales strength, product line, reputation, market coverage, sales performance, management succession, management ability, attitude, size of channel members.

Since then, many scholars try to synthesize what kind of criteria that can be used in strategic partner selection, such as Geringer (1991) with 15 key questions for international joint ventures, Brouthers, Brouthers, and Wilkinson (1995) focuses on four wide categories of factors called "complementary skills", "cooperative cultures", "compatible goals" and "commensurate levels of risk". Dacin et al. (1997) suggest that some characteristic to select strategic partner are an ex post analysis of motives, criteria, practices and/or outcomes of partner selection processes. After some interview with some experts and practitioners in high-tech industry, this study develops five big criteria to determine how to select the best partners. First, the characteristics of the partner which has some sub-criteria, such as unique competencies, compatible management styles, compatible strategic objectives, higher or equal level of technical capabilities. Second is marketing knowledge capabilities, which consists of increases market share, better export opportunities, and knowledge of local business practices. Third, intangible assets which consists of trademarks, patents, licenses, or other proprietary knowledge, reputation, previous alliance experiences, technically skilled employees among partners. Fourth, complimentary capabilities which consist of partners owned managerial capabilities, wider market coverage, diverse customer, and the quality of distribution system to those of the strategic partners. Finally, degree of fitness which consists of the compatible organization cultures, willingness to share expertise, equivalent of control, willingness to be flexible of partners compatible with that of strategic partners (Table 1).

Moreover, this study expected that these criteria will relate with satisfaction (subjective) and the business results (objective) from strategic partnership (Overby, 2005). This study determines satisfaction with the achievement level of strategic partnership goals. While the business results measured through the increasing of profitability. The framework is depicted in Fig. 1.