Competitive Strategic Alliances Through Knowledge Value Chain

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Strategic alliances are widely considered as collaborative strategies formulated and implemented to meet shared objectives and develop superior resources cooperatively. Among these objectives and resources, Knowledge-based capabilities and learning have received more attention in literature and numerous authors have investigated different aspects of strategic alliance pertaining to these two fields. However, from strategic perspective of knowledge management, knowledge value chain (KVC) and organizational knowledge chain (KC) systematically usher an organization to manage its knowledge-resources and based on which creates value and sharpens its competitive edge. However, in strategic alliance studies these two approaches (KVC and KC) have not been addressed enough and literature suffers from a conceptual gap. Therefore, this paper is aimed to bridge this gap theoretically and provide some valuable insights for researchers and practitioners.

Field of Research; strategic management, knowledge-based theory

1. Introduction

The dawn of 21st century was coincided with Globalization, liberalization and internet revolution as three phenomena that have metamorphosed international business milieu. Traditional competition has been abolished by a rising tide of fierce hypercompetitive challenges in a global scale. In wake of this situation and under these tough circumstances all companies irrespective of the industry and scope of operation are seeking ways to hone their competitive edge and develop more sustainable competitive advantages. In this sense, over past years strategic alliance as a growing field of study has been receiving an increasing amount of attention and a plethora of study has been devoted to investigate different aspects of this strategic movement.

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A glance at literature on strategic alliance shows that numerous authors have tried to signify the role of organizational knowledge assets and resources in strategic alliances (e.g. Mowery et al 1996; Parise and Henderson 2001; Cimon 2004; Mazloomi Khamseh and Jolly 2006; Connel and Voola 2007; Parise and Sasson 2002; Gomez et al 2006; Li 2008; Gravier et al 2008). In spite of this magnitude of studies the mass body of knowledge in this context must be further nourished by new advances in the theories of knowledge-based competitiveness. Dealing with competitive challenges through collaboration is not a simple task to be planned and accomplished easily but more radically it needs to be investigated through a new paradigm embracing strategic alliance as well as knowledge-based theory of firm (Grant 1996; Spender 1996) in order to illuminate other sides of cooperative competitive advantage in today’s Knowledge economy. From another angle, recent studies on knowledge management have borrowed the fundamental concept of value chain from strategic management and competitiveness body of knowledge and related this construct with other emerging issues in knowledge management discipline in order to pave the way for integrating knowledge management and strategic management disciplines and enhance conceptualization of value-based competitiveness in Knowledge age. This perspective synthesizes competitive abilities of alliances with those of knowledge management and leads up to a synergized competitiveness.

2. Methodology

This study philosophically falls under interpretivism class, undertaken research approach is explanatory and research strategy is literature survey. Consequently this study used secondary data and qualitative analysis techniques. International journals as well as proceedings are dug up through international well-recognized databases like emerald, science direct, Proquest, Ebsco and Springerlink as well as IEEEExplore. Papers were collected over a six-month period and reviewed jointly with authors over a three-month period. A Couple of discussions around the design and the objective of the study were done by some senior lecturers in three business schools as well as some PhD students in order to improve the flow of study. The arrangement of literature survey was planned to be started with reviewing strategic alliance field and then scrutinizing and elaborating the concepts of value chain, knowledge value chain and knowledge chain to further be conceptualized in competitiveness of strategic alliances and contrive a conceptual model illustrating this theoretical relationship.

3. Literature Review

According to Hitt et al (2006, P260-261) strategic alliance technically falls under cooperative and collaborative strategic actions which technically can be formulated for both business level strategies as horizontal and vertical complementary alliances and
also corporate level strategies for expansion and other objectives. Subsequently strategic alliance is defined as: a cooperative strategy in which firms combine some of their resources and capabilities to create a competitive advantage. Competitive advantage created by cooperative strategy is basically known as: collaborative or relational advantage which is pursued in a mutual basis by participating firms and a simple paradigm (figure 1) can delineate the way through which this advantage is achieved from organizational resources.

In existing literature strategic alliance has been also termed also as strategic coalition (Porter and Fuller, 1986) and strategic network (Jarillo, 1988). Therefore it is argued that, definition of strategic alliance implicates on some important issues which can be listed as follow;

1. Strategic alliance is a cooperative strategy which needs a good partner to conduct a developing partnership
2. Organizational resources and capabilities are shared and new ones are acquired and developed through a well-managed strategic alliance
3. Participating Firms pursue shared objectives and create a value-adding process to hone their competitive edge by creating cooperative competitive advantage(s)

Although these implications are clear and no one belittles the importance of them but the strategic logic behind the strategic alliance as a whole concept needs further clarifications. Since strategic alliances are fundamentally built upon organizational resources and designed to develop capabilities and meet shared objectives the most appropriate lens to study alliances can be resource-based view (RBV) of the firm. This

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**Figure 1.** The simple logic of strategic alliance (modified from Hitt et al 2006 page P, 72)
theory was originated by Penrose (1959) and then expanded by Wernerfelt (1984), Barney (1991), Grant (1991), Mahoney, and Pandian (1992) Peteraf, (1993) and further revisited by many others (Makadok, 2001; Barney, et al 2001; Barney, 2001; Priem and Butler, 2001a,b; Rugman and Verbeke, 2002). This theory empathically and persuasively claims that competitiveness comes from valuable, rare, inimitable and non-substitutable resources and organizational strategies must be formulated and implemented to meet these criteria (VRIN framework). In the other hand since strategy, according to Grant (1991) is the match an organization makes between its resources and environmental risks, threats and opportunities and today’s competitive landscape has made this match-making a complex and difficult task, companies are seeking cooperative ways to fulfill their strategic objectives. In respect to this premise, Strategic alliance has been acknowledged as one of the most-common approaches under these circumstances (Hitt et al 1998) because it provides a safe ground for reducing risks, improving organizational learning, achieving strategic flexibility as a competitive capability and increasing market share and power as well as positioning by decreasing the intensity of competition (Hitt et al 2006 P, 263).

Due to these beneficial results of strategic alliance firms normally plan and pursue their alliances across a wide range of strategies and activities and develop a numerous types of alliances from operational level alliances to business level, corporate level, promotional and price alliances, horizontal and vertical alliances and even synergistic alliances in order to maximize the cumulative value created by alliances and strategic partnerships (for a comprehensive typology of strategic alliance please refer to Hitt et al 2006, Kotler and Keller 2006 and Thomson et al 2007). Managing these strategic partnerships and dealing with control and risks involved in development and growth of alliances is a jigsaw puzzle in current business world which has been characterized with hypercompetition and turbulence (D’Aveni 1994). Strategic maneuverability in this revolutionized milieu requires collaboration (Hamel and Prahalad 1989, Hitt et al 1998) and this collaboration is not a simple program to be quickly strategized and conducted but it has to be managed largely based on the mutual trust, constant communication and ability to learn and transfer knowledge and other resources among partners in order to cultivate, develop, survive and thrive which in return gives rise to bilateral competitiveness (Kanungo 2005). To throw more light on this credo Drucker (1996) argued that they way in which future business is conducted is increasingly going toward partnership.

Accordingly scholars have devoted a remarkable amount of attention to study different aspects of alliance formation, evolution, growth and management (e.g. Pett and Dibrell 2001; Teng and Das 2008; Ryan and Morriss 2005; Taylor 2005; Butler 2008; Zineldin and Bredenlow 2003; Chen et al. 2008) and perhaps knowledge-based issues have received more attention due mainly to this notion that, today’s organizations are residing in knowledge economy and learning, transferring intangibles and developing knowledge-based resources and capabilities matter the most in establishment of alliances (Medcof 1997).
During partnership firms can develop two forms of knowledge sharing in terms of a reciprocal learning (Connell and Voola 2007) as:

1. The partners can obtain from each other technical knowledge and know-how
2. They can learn from each other management and business skills that individually they are lacking.

Based on this precious opportunity provided by strategic alliances it can be argued that, strategic alliances are not ordinary collaborations and partnerships but they must possess a strategic essence through which superior managerial resources are acquired and utilized competitively and wisely. Therefore, according to Akio(2005): Alliances are used to:

1. Acquire the managerial resources of other firms and accumulate highly scarce managerial resources and also
2. To skilfully apply the managerial resources of the firm and those of alliance partners.

In this sense and in the wake of today’s knowledge-based competition within which Knowledge-based strategies are the basis of sustainable competitive advantage and firms should focus on the creation and accumulation of knowledge-based competencies in order to yield long-term survival (Mazloomi Khamseh and Jolly 2006) strategic alliances are witnessing a new stage of evolution that can be named as knowledge-based strategic collaborations or K-based alliances. Over last years it has been investigated that alliances can be used as one of the most successful ways of knowledge-creation and transfer (Simonin 1997; Inkpen 1998a,b;Van et al. 1999; Mazloomi Khamseh and Jolly 2006, Li 2008) and the most critical reason for performing these function is to create superior value jointly as a pathway to attain a sustainable competitive advantage.

Based on this tenet It makes more sense to investigate strategic alliances from knowledge-based theory of the firm (Grant 1996;Spender 1996) or synonymously knowledge-based view of competition (Kogut, and Zander 1992;Kogut 2000; Alavi, and Leidner 2001; Nickerson and Zenger 2004). This school draws attention toward the criticality of organizational knowledge resources as idiosyncratic resources (Nilesen 2002) in the form of intangible capitals and assets in creating value that traditionally were cultivated through physical and material resources (Li 2008). These knowledge-based sources of value will lead firm to outsmart and outperform competitors in knowledge-based rivalry and strategic alliance enables firm to acquire and deploy these resources faster and more effectively (Iyer 2002;Oxley and Sampson 2004; Gomez et al 2006) and helps them to develop competitive capabilities in particular knowledge-based dynamic capabilities ( Teece et al 1997; Eisenhardt, and Martin, 2000; Zahra and Nielsen 2002) with a lower cost( Grant 2005, P168).
Moreover, globalization and international markets' uncertainties and challenges have made strategic alliances as a strategic necessity that is no longer considered as an option (Parise and Henderson 2001). In line of this fact and in consistency with aforementioned findings, strategic alliances can be undisputedly described as strategic partnerships in pursuit of creating knowledge-based sources of competitive value. To articulate this statement the concept of value chain developed by Michael porter (1998) is used in this study. According to Porter, value chain is a paradigm to analyze sources of value across different departments and activities of a firm and analyzing value chain shows the way of creating incremental value. This model also can be used as a means of strategy formulation and implementation and therefore is vigorous enough to be embedded in interfirm analysis and interrelationships among firms in different industries. Hitt et al (2006) have used the value chain model in developing a comprehensive typology for strategic alliances and classified alliances based on the state of value-chain collaborations among partners such as horizontal versus vertical complementary alliances (P267). The value chain as a fundamental concept in strategy and equally importantly operation analyses has been frequently leveraged in knowledge management literature (e.g. Lee and Yang 2000; Powell 2001; Eustace 2003; Marr and Schiuma 2004; Wong 2004; Liu and, Sharifi 2008). According to Eustace (2003) in knowledge economy competitiveness emanates from intangible competencies which are basically built upon knowledge-based capabilities ( Hitt et al 2006, Figure1) and can be divided into three groups as ( Vollmann 1996 and Eustace 2003):

1. Distinctive competences: key factors of differentiation those are difficult or costly to replicate.
2. Core competences that are competitive necessities and
3. Routine competences as routine activities firms must do, in order to stay in the game.

And important intangible competencies as value drivers are in underpinning value chain (Eustace 2003) which are developed more effectively through strategic alliances ( Hitt et al 2006 and Grant 2005) by utilizing knowledge value chain. In this regard, Marr and Schiuma 2004 defined knowledge value chain as cause-effect links between knowledge management initiatives and business performance that here is referred to development of core and distinctive competencies through strategic alliances in order to compete more effectively . In former studies ( Spinello 1998) argues that knowledge chain must be embedded in strategy formulation and be integrated with value chain model . In this sense the author( Spinello 1998) defines knowledge chain (KC) as the capacity for recognizing, anticipating and acting on market shifts through a four-stage model consisting of internal awareness, internal responsiveness, external responsiveness and external awareness. These activities links internal resources with external changes and create a knowledge-based competitiveness because knowledge can be translated into prompt, responsive actions.

Following the argumentations about strategic alliance and considering these studies, it is logically asserted that firms can use this framework in their strategic alliances in order to fortify their strategic partnership and improve their knowledge transfer in the wake of
market changes and challenges. Moreover, Wang and Ahmed (2005) added that, knowledge value chain is a pragmatic tool for enhancing organizational capabilities, strategic flexibility and organizational learning, as antecedents of superior performance and competitiveness. The authors (Wang and Ahmed 2005) also developed a more comprehensive and detailed version of knowledge value chain as a chain of KM processes (identification, acquisition, codification, storage, dissemination, refinement, application and creation), KM enablers (knowledge system, knowledge culture, organizational memory, knowledge sharing and knowledge benchmarking)( figure2). 

More recently Najmaei and Sadeghinjead (2009) also showed that how knowledge management enhances strategic flexibility and argued that the functions of a knowledge management system in the form of a knowledge chain assist firm strategically to become a resilient entity in the turbulent world of business. Conceptually, strategic alliances bring about same results and have to be also carefully managed in terms of shared culture, structure and systems (Hitt et al 1998) which are simply organized and orchestrated in KVS model of Wang and Ahmed (2005). Consequently this knowledge value chain (figure2) and the findings of the study of Najmaei and Sadeghinejad (2009) seem to be seamlessly intertwined.

\[\text{Figure2; Knowledge value chain (Wang and Ahmed 2005)}\]

From another side, Fu( 2002) used another model for knowledge value chain as a chain of knowledge creation, diffusion and implementation developed by Melissa and Gretchen (1999) and argued that knowledge creation, diffusion, transfer and application can result in more favourable outcomes. In addition, this knowledge chain is better subsumed in knowledge value chain to illustrate a clear relationship between business value chain and its components as described by porter ( 1998) includes of
logistics (IL), outbound logistics (OL), operation (OP), marketing and sale (MS), service (SE) as graphed by Lee and Yang (2000) in figure 3.

This model can be also linked to knowledge value chain paradigm of Wang and Ahmed (2005) especially when creating a shared competitive advantage through establishment of a strategic alliance. Thus, these conceptualization of knowledge chain (KC) and knowledge value chain (KVC) is more appropriate for development of alliances aiming to contrive intangible competencies and competitive capabilities across different stages and positions of business value chain as categorized by Hitt et el (2006) that strategically embraces a wide range of formations like, horizontal and vertical or business and corporate levels alliances.

Finally these theoretical findings as well as aforesaid analytical conceptualizations consensually underline that, strategic alliances must be carefully equipped with knowledge chains and partners as strategic allies must comprehensively utilize the components of knowledge value chain in order to enhance their cooperation and expedite the creation of reciprocal competitive capabilities and competencies to reduce the intensity of competition and sharpen their bilateral competitive edge. Moreover, this notion conceptually signifies that KC and KVC facilitate and simplify knowledge transfer and sharing and improve symbiotic relationships between partners. Next section synoptically shows a conceptual model encapsulating these findings in order to pave the way of fulfilling the objective of this study.
4. A conceptual Model

In literature survey it has been unearthed that, strategic alliances are planned and conducted to share organizational resources especially knowledge-based ones to create more advanced competencies cooperatively that are valuable, rare, intertransferable, inimitable and non-substitutable. Therefore, alliances are aimed to create cumulative value that exceeds the value created individually by each firm. Hence, creation of these distinctive and core competencies as sources of value necessitates a comprehensive mechanism of functions along their value chains. In the other hand theoretical findings of this study explicate knowledge chain as a process of knowledge creation, diffusion, transfer ad application which must be properly strategized, formulated, implemented and managed across different organizational activities based on a knowledge-based business value chain. This knowledge value chain encompasses organizational cultures, structure and systems like organizational memory and ICT infrastructure in addition to core functions of organizational knowledge management ranging from knowledge identification, acquisition, storage and creation to knowledge dissemination and application. Therefore, it can be theoretically and well as analytically conjectured that knowledge chain is embedded in knowledge value chain and this value chain must be felicitously analysed in formation and development of strategic alliances in conjunction with business value chain. This approach is a strategic means of creating superior intangibles and knowledge-based competitive advantages. This study therefore proposes that an integrated model of knowledge value chain can be utilized in strategic alliances based on the studies of Lee and Yang (2000) and Wang and Ahmed (2005). This integrative model is worth strategically to be taken into classification of strategic alliances as Hitt et al. (2006 PP, 267) have done previously. Thus, a conceptual model can be graphed as figure 4 which demonstrates how this integrative model consists of knowledge value chain, business value chain and knowledge chain is embedded in formation of strategic alliances and results in a more effective and synergized collaboration that expedites and enhances knowledge sharing, learning, flexibility and competitiveness.

5. Conclusion

This study reviewed literature in the context of strategic alliances from a knowledge-perspective and showed that theoretically the main rationale behind strategic alliance is to create superior managerial resources and to utilize these resources skillfully and cooperatively. Accordingly from two seminal theories of resource-based and knowledge-based view of the firm this essay argued that today’s strategic alliances are aimed to acquire and develop knowledge-based competencies cooperatively and create a set of bilateral sources to add superior value to organizational performance and ergo competitiveness. In this sense, creation of a sustainable competitive advantage through strategic alliances must be theorized within the strategic framework of value chain as an
analytical as well as practical tool in order to capacitate and enable the organization to optimize the growth, development and success of its partnerships or alliances. Therefore from knowledge-based view of competitiveness, the concept of knowledge chain as the process of knowledge creation, diffusion, transfer and application can be integrated with knowledge-based value chain paradigm that has been formed according to conventional business value chain of Michael porter and also has been adjusted with pertinent knowledge-based theories. Finally these conceptualizations were shaped a schematic model that emphatically illustrates how KVC and KC make strategic alliances more competitive and effective in today’s knowledge-based economy.
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