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Abstract

With increasing globalization, competitive landscape has undergone tremendous change. To cope up with turbulent environmental demands, firms are entering into alliances to bridge capability gap. However, movement from skill substitution to capability development requires firms to adopt organizational learning approach and to do so require organization reconfiguration. So far, literature has paid little attention to organizational redesign in response to the requirement of learning and developing capabilities. In a Joint venture, three actors are involved; Parent firm with capability, joint venture and parent firm seeking capability. This paper looks at issue of organizational learning and redesign from the perspective of parent firm seeking capabilities. An integrated framework is developed with addresses issue of identification of learning level and maps it with level of interface, control, and process orientation. Based on this framework, appropriate organizational design criteria to accomplish specific learning task processes can be formed for effective and targeted yet stable learning depending on the context.
Introduction

Historically, strategic alliances have taken many forms including joint production, technology transfer through licensing, buyer-supply agreements through OEM or ancillary arrangements, co-marketing and co-branding and so on. With increasing globalization, environment has become fiercely competitive. In such dynamic environment, firms have no option but to increase their competitiveness to ensure sustainable performance. Firms enter into alliances to learn know-how and capabilities from their alliance partners (Kale, Singh, Perlmutter, 1989). Consequently, knowledge links (Badaraco, 1991) have increasingly becoming dominant form of cooperation in response to increasing global competition. The objective of this form of cooperation is to get access to skills and capabilities of organizations thereby enhancing in-house capabilities. The link is tactical when objective is to acquire or substitute a skill. It is strategic when firm enters into multitude of alliances to support its long-term objectives. In fact Inter-firm cooperation has become one of the major strategies in pursuit of global competitive advantage. The trend is towards alliances between firms whose activities are global, who are or may become direct competitors, as opposed to single-market joint venture between firms with large differential in size (Contractor and Lorange, 1988). Consequently, they are unstable and prone to premature dissolution (Parkhe, 1991) or lead to poor performance.

Much of the strategic literature has focused on antecedents of strategic alliances that include reasons for setting up alliances, objectives of alliances, and areas of conflict (Harrigan, 1988). Management of alliance has not received due attention. Previous research has suggested that firms enter into joint ventures to enhance their
competitiveness through building unique capabilities. Numerous studies have suggested that the additional benefit of building capability will accrue from selecting a partner who can supply the complementary skills or capabilities. However, issuing a broad guidance to managers to seek partners with complimentary capabilities is of little help. Instead, firms seeking capability should map their requirement with the other partner’s capabilities. An organization aiming to become a dominant player in global arena needs to undertake radical changes in their processes and organizational structures (Yeniyurt, Cavusgil, Hult, 2005). For this paper, I use Chandler’s (1962) theory of ‘Structure follows strategy’ to delineate how firms map learning requirement with organizational structural mechanisms. This paper employs the organizational learning theory to explore the following question. *What kind of structural mechanisms should firms’ design to ensure congruence with its learning objectives, its partner’s profile, and context?* The assumption is that firm seeking capabilities enter into alliances with the explicit purpose of transferring skills from joint venture and the transfer is of both tacit and explicit knowledge.

The remainder of this paper is organized as follows. First, I address the issue related to joint venture as a firm strategy to build capabilities particularly with the objective to use JV as to learn both tacit and explicit knowledge. In the second section, the theoretical framework encompassing organizational learning and capabilities is described. Third section provides structural link between JV entity and learning motive through structural mechanisms firms employ. An integrated framework is presented in section four. The paper concludes by discussing theoretical and managerial implications.
Joint Venture as Firm Strategy

Researchers have explained cooperative strategies from various theoretical perspectives: strategic management theory, organization theory, economics and game theory (Beamish and Banks, 1987). Each of these theories provides partial and contextual explanation for motive behind adoption of joint venture as strategy by a firm.

Under economics three main perspectives are of market power theory, transaction-cost, and agency theory. Market power theory (Porter, 1980, 1985) explains how firms can improve their competitive position. The nature of collaboration can be of offensive or defensive nature or a combination of two depending on purpose of partners. Transaction cost theory (Williamson, 1975) views cooperative alliances as a cost reducing method of organizing business. The focus of agency theory (Jenson and Meckling, 1976) in context of cooperative alliance is limited to determining the most efficient contract governing relationship between principal and agent. Strategic management theory highlights the need for fit between the respective strategies of cooperating partners. Organization theory is mainly concerned with inadequacy or resources as motivation for entering cooperative alliances. This perspective is covered under Resource dependence theory (RBV) (Barney, 1991). It indicates that firms establish ties with other firms to mobilize resources or competencies. In fact RBV also contributes to the understanding of the relation between resource position and control within strategic alliances. The model proposed by Brooke & Buckley (1988) categorizes FDI motives into resource seeking, efficiency-seeking, and market-seeking.

Kogut (1988) also singles out three basic motivations for entering into JV: Lowest cost formation, improved strategic position, and organizational learning. The focus of this
article is on formation and organization of joint ventures triggered by a need to acquire tacit knowledge (Polanyi, 1967). By definition, tacit knowledge cannot by transferred by contractual codified means and is communicated only by teams working together. A joint venture is a response to learning needs. Moreover critical evaluation of all these diverse theoretical paradigms reveals that the underlying motive of firms in all these cases-resource, market or efficiency, cost, strategy is to enhance competitiveness in relation to their rivals that is directly related to RBV and organizational learning. From RBV and learning perspective, a Joint venture will result if both firm and its proposed partner have complementary resources and perceived inadequacies. So for this paper, I begin with premise that firms adopt joint ventures as a strategy to enhance competitiveness. In addition, focus is also on organizational design as most of the theories only talk about the antecedents of alliance formation, whereas managers have to face the task of also organizing the JV system comprising of the two partners and the joint venture entity. The organization of JV and also parent firm is as critical for its success as the formation of JV itself.

To summarize, motives for formation of joint ventures vary from internal reasons, competitive goals or strategic goals (Harrigan, 1988). They may even be combination of these factors. Therefore, even before inception of the JV, partners should be clear about the motivations for formation of JV. In fact, the expectations and goals which lead to formation of joint venture also influence the structuring of the organization and also become the only rational basis for evaluation of performance of JV. The alliance also offers opportunity to the partners to learn. Firms learn to cooperate and cooperate to learn. Through latter mechanism they gain specific knowledge.
After establishing the motive of having a joint venture, I now discuss the next important question of cooperation between partners. Prior research suggests that a JV’s ability to realize its strategic objectives is influenced by partner selection, especially because it determines availability of skills and resources from partners (Killing 1983; Harrigan 1985). Defining a uniform criterion for partner selection is futile (Killing 1983) as joint ventures vary in nature and contexts. Nevertheless, prior studies have generally been vague or silent regarding which criteria a firm might use in attempting to select a "complementary" partner, or in identifying which contextual variables might help determine the relative importance of these criteria. In particular, it is possible to distinguish between criteria for operational skills and resources required by a JV for its competitive success (i.e., "task-related" criteria) and criteria for efficiency and effectiveness of partners' cooperation (i.e., "partner-related" criteria) (Killing, 1983). Examples of task related criteria include tangible assets like patents or technical know-how, financial resources, expert manpower, and access to marketing and distribution systems. Similarly examples of partner-related criteria include culture, past experience of working with partner, trust between partners' top management teams, and structural elements of size or structure. In this paper, I focus on task related complementary skills of partner, which get transferred to the joint venture. The assumption is that firm seeking capability will select partners who will have task related skills.
Organizational learning and capabilities

Reasons for growing importance of building capabilities through learning

With increasing globalization, environment has become fiercely competitive. In such dynamic environment, firms have no option but to increase their competitiveness to ensure sustainable performance. The key question for strategy scholars continues to be, ‘Why are firms different?’ While several explanations have been provided, I still do not have a definitive answer despite decades of empirical and theoretical research on the question. As the environment become more global, dynamic, and turbulent, firms have realized that it will be difficult for them to do everything on their own. A dominant framework in the strategy literature to address the question of differential performance among different firms has been the resource-based view (RBV) of the firm. According to RBV, firms in the same industry perform differently because, even in equilibrium, firms differ in terms of the resources and capabilities they control (Amit and Schoemaker, 1993; Barney, 1986). Not surprisingly, attention of strategy scholars has shifted to the dynamic processes of creating sources of competitive advantage, viz. acquisition, alliances, dynamic capabilities (e.g., Eisenhardt, 2000; Henderson and Cockburn, 1994). In fact, the dynamic-capability construct defined as ‘the firm’s ability to integrate, build and reconfigure internal and external competencies to address rapidly changing environments’ (Teece, Pisano, and Shuen, 1997) has become a popular mechanism to remain competitive under conditions of change (Teece,1987). Examples of dynamic capabilities also include alliance and acquisition routines that bring new resources into the firm from external sources (e.g., Capron, Dussauge, and Mitchell, 1998; Gulati, 1999; Powell, Koput, and Smith-Doerr, 1996). Firms have adapted these practices, viz. Cisco
Systems is known for strong acquisition and post integration capabilities. Similarly, biotech firms that are able to access external knowledge through alliances show superior performance (Powell et al., 1996). Apparently, firms attempt to increase their capabilities through by entering into alliances and absorbing their partner’s successful practices. This process of adaptation to external environment and internal enhancement involve organizational learning.

But the important thing is not to acquire knowledge but to gain access to relevant knowledge and to create new knowledge (Buchel, Prange, Probst, & Ruling, 1998). This is possible only when companies can increase their stock of implicit knowledge (Nonaka and Takeuchi, 1995). Implicit knowledge cannot be clearly articulated and can be passed only by close personal contact. Implicit knowledge gets tied up in organizational routines which cannot be made explicit (Nelson and Winter, 1982). Acquiring implicit knowledge involves long development times and continuous collaboration at the personal level. Thus acquisition of implicit or tacit knowledge is one of the strong motivations for entering into joint ventures especially when the objective is organizational learning.

**Organizational Learning concepts: Types & levels of learning and role of individual**

Several researchers have pointed that the organizational theory literature is fragmented and consist of multiple constructs (Fiol & Lyles, 1985; Huber, 1991). However there are certain common themes that run across different works. One of them is on role of individual in organizational learning. In an organization, although it can be said that organizational learning is not merely individual learning, the learning process and subsequent accumulation always start with the individual (Argyris & Schon, 1978).
But for this personal knowledge to diffuse in the organization and become organizational knowledge, it has to be converted into information. The transformation occurs through processes that are driven/made up by *organizational structure*. Further, the nature of knowledge also determines absorption, assimilation and conversion of knowledge. Polanyi(1967) distinguished between *tacit knowledge* and *explicit knowledge*. Tacit knowledge is personal, intuitive and context specific, whereas explicit knowledge is specified and codified. For a firm entering into a joint venture with the explicit objective to learn, it is the tacit knowledge, which is of prime interest to it. Explicit knowledge can be bought or sourced through contractual agreements.

If I look at the definition of organizational learning, most of them touch upon issues of encoding and modifying routines, acquisition of useful knowledge to increase organizational capabilities. Thus two important issues are of unit of analysis, i.e individual or organization and locus of attention i.e. internal or external. Since, focus of this article is on organizational design to enhance learning in joint venture; the entire issue has to be addressed from the perspective of two partners. In joint venture between firms from emerging and developed economy, the objectives of two partners are very much different. The primary and sometimes sole objective of firm from emerging economy is likely to be transfer of expertise and technology from the foreign partner. But mere intention doesn’t serve the purpose. In the context of a joint venture, the partner, especially the one targeting transfer of expertise should be aware upfront about the level of knowledge it is seeking. *Child and Faulkner (1988) identify technical learning, systemic learning, and strategic learning as three levels of organizational learning.*

Technical learning denotes the lowest level of organizational learning and aims at routine
improvements within the boundaries of existing organizational knowledge. The middle level involves changes to the boundaries or structures of the existing knowledge through reframing of organizational systems and perspectives. The third and the highest level of learning is strategic and is about learning how to learn through cognitive processes. Apparently the learning requirement and aims are different in each case. Although, objective can be combination of all learning or firms may not be clear about the domain of learning, for firms entering into joint venture for the explicit purpose of learning, clarity on targeted level of learning would help to design appropriate learning mechanisms. This is especially true for firms engaged in competitive learning.

*The rate of learning also depends on type of alliance.* Garrette and Dussauge (1996) found a significant difference in learning intentions of ‘Scale’ and ‘Link’ strategic alliances in global automotive industries. Scale alliances are those in which the partners contribute similar resource pertaining to the same stage or stages in the value chain. Link alliances are those in which the partners contribute different and complimentary capabilities relevant to different stages in the value chain.

**Organizational Design for Joint ventures from learning perspective**

There is nothing called ideal organizational structure which will suit all joint ventures (Buchel, Prange, Probst, & Ruling, 1998). Yet both managers and researchers appreciate the importance of having an appropriate structure. Joint ventures through their evolution continuously change in response to varying environment as well as demand from the parents. In fact researchers have underscored the need for a balance between organizational stability and change for years (Chandler, 1962; Cyert and March, 1963).
The relationship between structure and strategy is equally well established. Earlier research has addressed issue of managing alliances in a perfunctory manner. Several of them have recognized the hybrid nature of alliances. Few areas which have received attention are structure, associated processes, their network character, and issues of control and autonomy. Some others share process school of thought similar to one proposed by Doz and Prahalad (1993) for multinational companies. They argued that a structural theory of MNCs has little to offer in view of structural indeterminacy. Instead what is required is a study of underlying processes that transcend the structural dimensions and focuses on underlying processes. Furthermore, the same argument can be applied to strategic alliance considering that they are under continuous evolution and consequent reconfiguration. However, this paper argues that structural character of firm does have relevance especially when I link it with specific learning goals of partner(s). The problem arises when the goal of JV are not clear upfront. Before I elaborate on this argument, I present the theoretical background for linkage between learning in joint venture system and organizational design.

As discussed under organizational learning section, learning in an organization primarily takes place through individuals. Therefore from an organizational design and strategic human resource perspective, it is of paramount importance to create conditions and systems which support creative individuals and provide suitable context to them to create knowledge. The organizational design should be appropriate to the objective of learning and the context. That is it should be able to reduce barriers to learning imposed by structural and other factors. In a JV formed for explicit purpose of organizational learning, there could be competition among partners for learning. The organization of JV
can assume many forms varying from pure hierarchical structure to a network model where collaborating partners are linked by a variety of relationship.

However, what is more important is to be aware of the nature of knowledge being targeted for learning. Pucik (1988) suggests that partners should examine whether the leverage is on resources or on competencies. Examples of alliances that leverage resources are licensing, technology transfer, joint product development (pooling of resources), co-distribution (economies of scale). In these alliances, resources contributed have a specific market value and as contribution as well as withdrawal of resources is explicit, control is easy. In contrast, alliances that leverage information-based invisible assets like competencies focus on management and organizational skills, technological expertise, market knowledge and so on. As invisible assets are embodied in people within the organization, they represent tacit knowledge and can only be learned through prolonged association with partner firm (Teece, 1987).

As regards mechanisms which companies adopt to acquire knowledge, Buchel, et.al. (1998) have identified the basic dimensions of a joint venture structure. As per them, the basic structure of the joint venture is initially decided by the partners. However, once the joint venture as a separate entity is created, decisions are taken both by the partners as well as the joint venture. The new entity is designed in such a way to make best use of resources available to the joint venture. The authors describe the organization structure of a joint venture in terms of three opposites as represented by the diagram below.
Interface management in a joint venture means structuring the exchange of information and resources amongst the companies in the joint venture system. The importance of interface management is highest for joint ventures which occupy significant position in the value chain of partners. While authors have talked about level of interface, they have not highlighted the congruence of strategic objectives with appropriate interface level. For example, if the goal is strategic learning, interface has to be at the highest level.

The issue of control becomes important when the joint venture starts functioning. Control is important because of several reasons (goal realization, feedback, appropriation risk. Goal congruence and trust between partners will minimize need for control. Thus partner selection is an important input before entering joint venture. The partner’s need to control the joint venture increases with (a) strategic significance of JV for the partners; (b) quantum and quality of resource transfer/shared resources (Harrigan, 1986).
To have control organizations can have process oriented, content oriented or context oriented control mechanisms. Process oriented control mechanism is lateral and operates through committees or teams. Context oriented control is achieved by posting employees loyal to the parent firm in the joint venture or designing appropriate incentive systems. The behaviour can be explained by agency theory. Content oriented control systems are achieved by controlling decision making process or board veto power or explicit contract provisions. It is resorted when the intention is to push partner’s agenda through joint venture. Another form of control mechanism which Buchel et.al.(1988) discuss is on compatibility of management system, but his seems to be more of problem minimizing approach.

**Integrative Framework:**

So far I have discussed that firms adopt alliances (joint ventures) as a strategy to learn. I have also discussed that knowledge is of two types, tacit or implicit and explicit. Further knowledge can be acquired at three levels; Strategic, systemic, and tactical. Organizations adopt mechanisms of interface and control to acquire knowledge. And they exercise control through process based, content based or context based systems. But what is lacking is an integrated framework which can map types and levels of knowledge required with structural mechanisms. The attempt is to align objectives with implementation. The integrated framework is presented below.
I start with the presumption that the knowledge requirements of a firm are unique and possibly multiple also. So, first it has to identify the level of knowledge it requires. The words knowledge and capabilities interchangeably. Based on the assessment, parent firm has to design structure and systems so that the desired objectives of knowledge acquisition are met. For example, if the objective is to acquire strategic decision making capability, the interface between joint venture and parent firm has to be the top level, control approach has to be content, and control content has to be low. By the phrase control content is low; I infer that the relationship has to be based on trust. Only then the other partner would be willing to transfer strategic knowledge. To conclude, higher the level of knowledge required, higher has to be the interface level, lower has to be the content of control. The control approach indicated extent and process of involvement. For example, where objective of knowledge enhancement is overall systems improvement, managers have to be deployed in JV who can transfer knowledge back to the parent firm.
There has to be congruence between strategic objectives and appropriate interface level. For example, if the goal is strategic learning, interface has to be at the highest level and trust has to be developed because Firms will tend to protect their core capability. Further tacit component of higher level learning will be more. Hamel (1991) points to the possibility of asymmetric learning between partners. This indicates failure of partners to convert JV into a cohesive partnership. When this happens trust (Barney & Hansen, 1995) takes a beating which gets reflected in increased attempts by firms to protect their knowledge.

**Conclusion**

This paper presents an integrated framework, which maps knowledge requirements with the structural mechanisms. It also addresses issues like partner selection. Firms seeking competencies through learning mechanisms seek compatible partners. The mode through which these competencies are acquired or transferred is by formation of a joint venture. The strategic context of parent firm, partner firm, and alliance influences the criterion for selecting partner because the knowledge requirement of the firm seeking capability enhancement may vary. So, if the knowledge requirement is only at a tactical level, the partner selection has to be accordingly. In the context of internationalization, identification of a compatible local partner is a key decision in joint venture formation. The competency set of partner firm should meet the requirement of global firm. This variation would be based on the specific learning requirement of the partner firm. This suggests that the contingency variable determine the selection of parent firm.
With regards to organizational design, the framework presents broad guidelines on designing structural mechanisms. In that sense, the paper's focus is more on task-related criteria (Level of knowledge required) with specific components of structural mechanisms (Control approach and content, Level of interface). In fact this focus on task-related criteria is in line with arguments by Harrigan (1988) that relationship traits are less important in determining effectiveness of cooperative strategy. So if strategic competencies are the principal requirements, the ideal mapping will be an content based control approach, top management as interface and relationship based on trust (low control).

To some degree the suggested organizational structure is high on flexibility yet stable. So, if the knowledge requirements change with change in context (environment); managers know which structural mechanisms to adopt. The framework provides useful insights even in the context of rapidly changing environment. In such environment, organizations need to be flexible and nimble to counter any competitive threat and also retain stability in their design for learning and growth. In fact organizations are supposed to organize more explicitly around processes/tasks than traditional-form organizations that emphasize functional hierarchy. The framework also encompasses the impact of environment on organization design. Knowledge requirement may change depending on the nature of external environment. For example, in a stable environment, the requirement of control or for that matter interface may be lower as compared to a turbulent requirement. To conclude, the framework will probably be useful to managers in structuring knowledge requirements and designing appropriate structural mechanism for targeted learning.
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