Interorganizational Relationships and Learning

By

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Introduction

In the last two decades the literature concerning interorganizational relationships (IRs), particularly strategic alliances, joint ventures, and social network analysis, has exploded. There has been a growing interest in how learning occurs in these various forms of cooperative arrangements. The nascent literature concerning learning processes in IRs suggests that learning occurs on both micro and macro levels (e.g. Knight 2002). At the micro level of analysis, inter-personal links generally offer individuals the opportunity to share and learn skills that will improve their personal lives. At the macro-level of analysis, IRs often provide a forum for professionals to share and receive knowledge which may result in improving their companies' competitiveness and profitability. It is the latter level of analysis that this essay addresses, primarily focusing on the ways in which learning through IRs improves organizational life. IRs have the potential to add value to organizations in two ways: 1) they provide the possibility for firm innovation and enhancement, and 2) they also offer employees the chance to discuss current professional practices with others in related fields, which may enable employees to perform better their various tasks.

The purpose of this essay is to understand better the ways in which organizations learn through their use of IRs. First, it explores literature that discusses the various kinds of IRs and their functions and how interorganizational partnerships may contribute to learning within an organization. Next, it highlights the results of interviews of two local nonprofit CEOs who participate in IRs in an effort to compare the extent in which these individuals' practical experience relates to and agrees with the scholarly literature. While the benefits of IRs are usually discussed in reference to their utilization in the public, private and nonprofit sectors, "dark networks," or organizations and individuals which conduct illegal business transactions, also heavily rely on IRs. This issue is briefly discussed before the final section that discusses how the research of networks relates to several paradigms of organizational theory, particularly transaction costs economics, resource dependence, and institutional theory.

Types of Interorganizational Relationships

The importance and utilization of IRs is not a new phenomenon in organization theory research. What is new, however, are the efforts to study empirically the various aspects of IRs, including the learning that takes place through them, and a better understanding of how to manage them. Part of the challenge in studying IRs is the fact that they appear in many forms. An informative article by Barringer and Harrison (2000) distinguishes between the most commonly found types of IRs used by firms: joint ventures, networks, consortia, alliances, trade associations, and interlocking directorates. While these IRs are difficult to delineate clearly and privilege the for-profit sector, the distinctions offered by Barringer and Harris provide a valuable framework upon which future IR research can build[1]. Their findings are summarized in Table 1.

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[1] If these descriptions in are adhered to, there are certain characteristics that distinguish a network from an alliance, for example. However, much of the literature on IRs do not make these distinctions, and most IRs are referred to as network relationships. Therefore, much of the following discussion will use this same terminology.

Table 1: Types of Interorganizational Relationships

Types of Inter-organizational Relationships	Description
Joint Venture	• A circumstance in which two or more firms pool a portion of their resources to form a separately owned venture. • They are traditionally used to enter into foreign markets or into areas that are secondary to the firm's main activities. The firm seeking access to the foreign market possesses the product, the marketing capabilities and financial resources. The local firm usually provides local legitimacy, market knowledge, and contacts. • Most commonly adopted in mature industries where it is important to capture economies of scale and scope. • Nevertheless, even in fast-paced newer industries, such as biotechnology, joint ventures can get products to the market faster and capitalize on opportunities for innovation and learning.
Networks	• "Constellations of businesses that organize through the establishment of social, rather than legally binding, contracts" (Barringer and Harrison 2000: 387). Researchers often view networks as a hub and wheel configuration with a focal organization at the center. This central organization coordinates the interdependencies of the various participating member firms. • Result is a group of firms that each focuses on their particular specialization in a combined effort to produce a product, service or new technology.
Consortia	• "Specialized joint ventures and smaller alliances" (Barringer and Harrison 2000: 389). • Organizations with a similar need come together to form a new entity that satisfies a need for everyone. • An example is a research and development consortia. Organizations will form a pre-competitive R&D consortium because it would be too expensive for most individual members to do this on their own.
Alliances	• "An arrangement between two or more firms that establishes an exchange relationship but has no joint ownership involved" (Barringer and Harrison 2000: 391). • They tend to be informal and can be short-term. No new entity is formed as in a joint venture, and there is no central administrative authority (like a consortium or network). • Most common types are marketing alliances and technological alliances. The former would be if an American food company wanted to gain access to Nestle's distribution channels, it could initiate an alliance (Nestle would benefit by adding products to its product line). The latter would be a situation in which two or more firms pool their complementary skills in a R&D alliance to create products faster and cheaper than either firm could do on its own. This differs from a consortia in that the R&D happens within the firms through information exchange, rather than in another central location.
Trade Association	• "Typically non-profit organizations formed by firms in the same industries to collect and disseminate trade information and technical advice, furnish industry-related training, and provide a platform for collective lobbying" (Barringer and Harrison 2000: 392). • These are common in industries where the threat of government intervention

	is high and lobbying activity is strong. Groups can be represented with one voice and hire professional lobbyists to speak on their behalf • The focus is on information sharing and lobbying rather than the higher priced activities of a R&D consortia.
Interlocking Directorates	• Direct interlock: "when an executive director of one firm sits on the board of another firm" (Barringer and Harrison 2000: 394). Direct interlocks are prohibited between competitors. • Indirect interlock: "when two firms have directors who sit on the board of a third firm" (Barringer and Harrison 2000: 394). • They can help spread innovation among firms.

The information in Table 1 presents the many options organizations have available to them to utilize IRs "as a way to disseminate information quickly, foster innovation, make [their] large hierarchical organizations more flexible, and enhance competitiveness" (Raab and Milward 2003: 418). The question permeating the IR literature is: how does this occur? Another way to look at this question would be to ask how organizations that participate in IRs learn from each other?

Learning through Interorganizational Relationships

Knight (2002) argues that understanding the process of learning within IRs requires a consideration of the different levels of analysis. She contends that there is a difference between network learning and learning networks. The former "is learning by a group of organizations as a group" (Knight 2002: 428). It is based on interactions among aggregated members whereby "a group of firms change the group's behavior or cognitive structures" so that it is the group that is the learner, not just individual organizations within the group (ibid.). Learning networks, on the other hand, are "groups of organizations that interact with the express purpose of learning together, from one another and through their interaction" (Knight 2002: 435). The focus here is generally on group dynamics and the learning of individual group members rather than the learning of the whole group. Examples of how learning occurs in Toyota's production network and a small college network illustrate these two levels of analysis.

Overcoming Challenges in Toyota's Network

Toyota's network of approximately 180 firms is cited often as an example of innovation and productivity. It also illustrates the manner in which learning takes place among network members to the extent that participating organizations become isomorphic. Dyer and Nobeoka (2000) studied Toyota in order to discover how this firm was able to create and manage network learning. After reviewing literature on knowledge sharing in a network setting, the authors found three main challenges: 1) motivating members of the network to share valuable information, usually the kind that individual firms want to keep private (proprietary); 2) limiting "free-rider" opportunities in which members enjoy the benefits of receiving knowledge but do not contribute their own information; and 3) promoting the most efficient (quick and easy) manner for information to be exchanged throughout network members (Dyer and Nobeoka 2000: 348). Dyer and Nobeoka then set out to ascertain Toyota's ability to overcome each of these dilemmas. The strategies that Toyota employs are summarized in Table 2.

Table 2: Toyota's Strategies to the Dilemmas of a Network Setting

Dilemma	Strategy
Motivating members to share valuable information	Strong identity[2] with the network motivates firms to participate. Toyota has a philosophy that it openly promotes within Toyota's network, called the "Toyota Group," and that is *kyoson kyoei*, or coexistence and co-prosperity (Dyer and Nobeoka 2000: 352). Through its use of four network-level knowledge-sharing processes (a supplier association, consulting teams, learning teams, and employee transfers) that foster personal relationships due to face-to-face consultations and interactions, Toyota "creates a social community at the network level" which, in turn, facilitates a shared purpose among network members (Dyer and Nobeoka 2000: 357). To illustrate, Toyota's suppliers frequently engage in information exchange through visits to various network member's operations. One executive was asked to comment on why this took place and he responded to the effect "we help each other out because it will benefit us all" (ibid.).
Preventing "free-riders"	Certain rules have been established to prevent free riding. Toyota provides free assistance to suppliers, and allows suppliers access to all of Toyota's operations. In return, the participating firm must be willing to do the same. Toyota strongly believes that network participation is based on reciprocity, and that proprietary information resides at the network level, not the firm level (Dyer and Nobeoka 2000: 358). As of 2000, "Toyota claims that no suppliers have received Toyota's help and then refused to open their operations to other suppliers" (ibid.).
Promoting efficiency	In order to maximize efficiencies, Toyota has created strong-tie networks in which "there are a variety of processes available to transfer both explicit and tacit knowledge in a multilateral or bilateral setting" (Dyer and Nobeoka 2000: 360). In other words, there are numerous ways in which knowledge-sharing occurs, both in large and small settings. Strong ties also reduce the possibility of structural holes which could otherwise prevent information from spreading quickly.

This case provides an example of how a network, in which Toyota is the hub firm and the other organizations form a constellation around it, is able to diffuse knowledge to its members. The result is that as each firm realizes the value of learning and integrating the Toyota Production System into its own operations, they become similar. Ultimately, it can be argued that Toyota benefits the most from this network since it becomes increasingly easy to work with each firm as they become more isomorphic. However, the firms benefit as well because the tacit information organizations generally keep private is exchanged within the network, improving participant's operations. The next example, that of a network of small private colleges, explores the dynamics of learning in a less structured environment.

Strong Ties, Weak Ties in a College Network

While participation in IRs can lead to learning that increases the productivity of member firms, there is evidence to suggest that they may also help organizations adapt to

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[2] Identity of the firm is defined by the organizational boundaries controlling who belongs to the network, "by shared goals and values, and patterns of interaction among individuals that give rise to a common language and common frameworks for action" (Dyer and Nobeoka 2000: 352).

changes in the environment. These changes include "changing consumer preferences, eroding industry boundaries, changing social values and demographics, new government regulations, new technologies, and other exogenous developments" (Kraatz 1998: 621). Environmental changes lead organizations to face the challenge of adapting their core practices or risk decline and failure. Network theory provides researchers with one method which to study organization adaptation.

Traditional models of adaptation, in which an organization on its own "confronts an environment and decides on responses in social isolation," display certain shortcomings that network theory helps to address since network researchers are concerned with "the wide variety of meaningful social relations that very frequently connect organizations to their peers" (Kraatz 1998: 622-3). Rather than acting alone during periods of uncertainty in which organizations need to make decisions that will affect its core practices, there is evidence to suggest that an organization will use its network in order to access different sorts of information, "affecting its ability to recognize and respond to environmental threats" (Kraatz 1998: 623). The network structures that Kraatz (1998) describes do not resemble the hub and constellation configuration that the Toyota network represents. Instead, they resemble social networks in which organizations may be linked directly to many other organizations, without one organization in the center controlling information or resource flows. One of the primary structure features of these social networks is the type of tie that links the organizations—commonly referred to as weak or strong. Kraatz argues that the structure of the network affects an organization's capacity for adaptive change, i.e. through the strength of weak ties or the strength of strong ties.

For instance, a large network composed of heterogeneous and short-lived ties provides member organizations access to a wide variety of information that is likely to be foreign and diverse. That is a strength of this kind of network, hence the strength of weak ties argument. In contrast, a small network, frequently comprised of organizations that are homogenous and share similar opinions, allow less access to diverse information. Since organizations in small networks spend significant time maintaining their relationships, they have less time to develop new ties, limiting their ability to gain insights and information from a variety of sources. According to Kraatz (1998), this may "hinder an organization's decision-makers to recognize and effectively respond to changing environmental conditions" (p. 623). However, the strength of strong ties is that they are more likely "to promote in-depth, two-way communication and to facilitate the exchange of detailed information between organizations" (ibid.). Moreover, strong ties can be more valuable then than weak ties because organizations in a small network are more inclined to trust one another and work together to understand environmental changes and potential responses.

There are three processes that Kraatz (1998) argues are ways through which organizations in a network might adapt their practices:

- Bandwagon imitation – generally occurs when an organization does not have strong ties to others in the network. An organization indiscriminately adopts a change that others in the network have also adopted, without waiting to see if the change proves useful. An organization may feel its legitimacy is at risk if it does not adopt the changes (Kraatz 1998: 625).
- Status-driven imitation – organizations are likely to imitate adaptive changes that large and prestigious firms in the network have previously undertaken in order to

gain legitimacy. The organizations that imitate the larger organizations in the network have more information than in the bandwagon approach since they "at least gather and process data on the stable attributes of early adopters" (Kraatz 1998: 625).

- Social learning – this occurs when organizations have strong ties to other organizations within their network. They remain in open communication in order to share useful information. This view suggests that organizations will only imitate others in their network "when the responses of early adopters…appear beneficial and feasible" (Kraatz 1998: 625).

While studying the practices of small private liberal arts colleges as they sought to adapt to the growing changes demanded of an increasingly business-oriented environment, Kraatz (2003) found evidence to suggest that change most often occurred due to the strength of strong ties and the resultant social learning. He argues that liberal arts colleges in smaller, more homogenous, and older networks were often "more likely to adopt professional degree programs" than those colleges participating in larger, heterogeneous networks with weaker ties (Kraatz 2003: 638).

Interorganizational Relationships in Two Nonprofits
The heads of two local nonprofit organizations, Andy Morikawa of The Community Foundation of the New River Valley, and Beth Obenshain of the New River Land Trust, provided insight regarding their use of networks. Both directors seem to use networks primarily as sources of information. When seeking specific information that would lead to expanding its operations, meeting with certain nonprofits is common. For instance, the Community Foundation recently decided to develop an endowment based on funds from the community. Through asking other organizations in his network where he could find an organization that had done this through developing relationships with its rural community, Andy came across the name of an organization in Tennessee. Andy visited this organization to discover more about this program. Not only did he gain information pertaining to the endowment, he also learned of a scholarship program that sounded interesting. He brought this idea back to the New River Valley and, realizing it was something his organization could not do on its own, approached Big Brothers, Big Sisters. The result is a new partnership to run the scholarship program. According to Mr. Morikawa, this tangential learning occurs often.

Similarly, Ms. Obenshain also recently visited an organization in Raleigh, NC. This land trust had increased its membership drastically over a number of years and she went there to learn what they did. She took the information back to her organization and has streamlined the ideas to match the New River Land Trust. She has frequently pursued this tactic of reaching out to established and innovative organizations, preferably within close geographic proximity, in an effort to create symbiotic relationships. This allows her organization to develop in two ways—partnering with these types of organizations offers a chance to learn from them (i.e. how they grew) as well as to improve her organizations' chances of obtaining funds, since donors increasingly want to see partnering. Ms. Obenshain believes that partnering with other nonprofits, particularly with older and well-established organizations, lends credibility and legitimacy to her organization.

In general, the IRs in which these local nonprofits engage resemble those of the private college networks rather than the Toyota network, since there is not one hub firm

in the middle of the constellation. Learning from other members of the network is similar to the learning that occur in the Toyota and college networks, through site visits, meetings, observation, and frequent communication.

Dark networks

Most of the discussion in this essay has focused on the commonly perceived reasons to utilize networks – they bring groups of individuals and organizations together to work collaboratively to find solutions to large problems or share knowledge with each other in order to improve and survive. There is another set of individuals and organizations that use networks in order to thwart legal systems and governmental organizations, however. This set has been termed by Raab and Milward (2003) as "dark networks," describing the illegal networks established by drug and human traffickers, terrorist networks, and arms traders.

Raab and Milward examined three cases of dark networks: heroin trafficking, Al Qaeda terrorists, and arms trafficking in West Africa. They found that these networks shared certain characteristics, particularly "their ability to stay flexible and adapt quickly to changing pressures and circumstances" (Raab and Milward 2003: 430). The need for this arises because as law enforcement and governmental agencies develop strategies to interfere with these illegal activities, the networks must continually devise mechanisms to overcome these forces. The authors also found that that interactions among individuals and groups within the networks are based on ties of trust (strong ties) which were established often before the illegal activity began.

The strength of strong ties is but one trait both covert and overt networks share. In addition, both have to find ways to secure effective management of conflicts. The approach in overt networks varies from that of covert ones. The former generally resolve disputes through "persuasion, exchange and negotiation," while the latter resort to "coercion and physical force" (Raab and Milward 2003: 432). Therefore, one of the main differences between these types of networks, besides the obvious goal of legal vs. illegal gains, is that members of covert ones face heightened personal risk by participating.

Relating Interorganizational Relationships to Organization Theory

Organization theorists have studied the use of IRs by firms, governmental agencies and nonprofits for decades. Predominantly, these scholars view organizations as open systems, or those organizations that are "capable of self-maintenance on the basis of throughput of resources from the environment" (Scott 2003: 89). In other words, the open system school argues that organizations do not operate as stand-along entities. Instead, they function as a result of adapting to external influence and contact with other organizations. Transaction costs economics, resource dependence, and institutional theory are several organization paradigms that consider the way in which an organization operates in relation to its environment. Table 3 below provides a brief description of each theoretical paradigm and examples of the types of IRs most likely to be linked to that paradigm.

Table 3: Linking Interorganizational Relationships to Theoretical Paradigms (Adapted from Barringer and Harrison 2000: 370).

Theoretical Paradigm	Description	Kind of Interorganizational Relationship
Transaction Costs Economics	• Defined as "the management costs associated with either internally producing the service or buying it through contracting" (Brown and Potoski 2003: 443). • Managers must continually decide whether their organization will provide a service themselves, or arrange for another organization to provide that service for them	• Joint ventures – avoid need to internalize all production and the threat of opportunistic behavior of the other firm • Networks – firms benefit from being able to specialize and trust in others (strong ties); opportunity to learn from other members
Resource Dependence	• Related to the open systems school of thought, it "focuses primary attention on one organization and its exchange partners" (Scott 2003: 118). • Posits that organizations do not operate in a vacuum – they rely on other organizations for resources and must adapt to changing external circumstances	• Alliance – take advantage of complementary assets of other firm • Consortia – firms benefit pooling their resources to advance their knowledge • Trade Associations – members have access to professional lobbying efforts; provides forum for learning
Institutional Theory	• Also related to the notion that organizations are open systems, it emphasizes that organizations are "strongly influenced by their environments" (Scott 2003: 199). • This influence stems from economic factors as well as socially constructed norms and beliefs that influence organizational behavior (Scott 2003).	All forms of IRs can be entered into with the express purpose of gaining legitimacy. IRs also provide opportunity for smaller, newer organizations to learn from more established organizations in an effort to mimic their behavior

Conclusion

In sum, from the case examples presented here of Toyota and the small liberal arts colleges, it appears that the strength of strong ties argument produces the best setting for learning. However, as the heads of two local nonprofits explain, organizations also learn through contacts in which they do not have close relations. Granted, these contact were found by reaching out to an established network, but this suggests that learning can occur through weak ties, as well. In addition to exploring the ways organizations exchange information and learn from each other, this essay also described the six most commonly found IRs in the business literature, briefly discussed the concept of "dark networks" as presented by Raab and Milward (2003), and outlined several paradigms of organizational theory that relate to the notion of IRs. As IRs continue to proliferate in the organization landscape, and the number of cross-sector IRs grow, I expect the empirical research will continue to expand, offering further insight into managing these relationships and exploring their value, especially as a learning tool.

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