

Collaborative Management of Interorganizational Intersectoral (ISIO) Cause-Based Networks: The Case of Firm Participation in Voluntary Environmental Sustainability Programs

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In today's global society it has become increasingly important for public managers to recognize and understand the networks that they work within. As the line between governmental and non-governmental services and roles blurs, public managers must seek to understand the context in which they manage. Every system of management - made up of methods, tools, and techniques in practice - has underlying assumptions of what ought to be the way of doing things in the organization and in relationships with other organizations. Many of these assumptions have implications in terms of how people ought to relate to other people in the various roles they play. In this paper, we assess the network ties among multi-sectoral organizations and develop a conceptual framework by which we can empirically measure and assess intersectoral ties that may successfully enable interorganizational intersectoral (ISIO) cause-based networks. We develop arguments and a set of propositions that specify the dimensions of ISIO cause-based network connections and the kinds of ties we might expect as tie activity evolves. We suggest that ISIO cause-based networks among participants of environmental sustainability programs continue to be examined, thereby improving understanding of ways in which public managers can support these activities. This type of information will be of interest to managers in the public sector as they

seek to understand their relationship in providing environmental information and education to those in the private and non-profit arenas.

The Rise of Collaborative Management to Address Social Policy Issues

While hierarchical management is the established foundation for public management, and in many ways is still *the* most common form of management, and market-driven approaches continue to serve as a basis for management reform through devolution and public-private contracting, collaborative public management is increasingly identified today as a viable approach to dealing with the pressing needs of the current social and political landscape (Agranoff, 2006 328; Koppenjan and Klijn, 2004; Thomson and Perry, 2006). A growing expectation today for public or nonprofit organizations is that they engage in partnerships with other organizations as a way to achieve stated goals. Although leveraging resources by engaging in partnerships has long been a predominant activity for public managers (Blau and Rabrenovic, 1991 717), the extent to which collaboration is expected across sectors today seems to be reaching levels greater than in the past (Agranoff, 2003; Gittell and Weiss, 2004; Rethmeyer, 2005; Samaddar and Kadiyala, 2005). In fact, O'Leary, Gerard, and Bingham (2006 8) note that "public managers now find themselves not as unitary leaders of unitary organizations...instead they find themselves convening, facilitating, negotiating, mediating, and collaborating across boundaries."

Indeed, it is managing a "networked organization" - multiple and varying organizations participating in the development of programs and policy, asked to share in the responsibility of their implementation - that frames much of the current dialogue for managers in both the public and nonprofit sector. Undoubtedly managers must be able to understand and navigate the ever more complex organizational environment. Expanding technological demands coupled with the changing faces of government have made this task increasingly complex. "Those tasked with public management must often seek to operate on structurally more uncertain terrain, firmament that can include regular ties with patterns of not-for-profits and profit-seeking entities as well as multiple formally governmental institutions" (O'Toole, 2000 23). It becomes increasingly important for public managers to recognize and understand the networks that they work within, both to be cognizant and as a mechanism to leverage resources.

Relationships that involve resource and knowledge exchange throughout the public, private, and nonprofit sectors are the norm and certainly the latest trend in successful social service models (Isett and Provan, 2005; Lazzarini and Zenger, 2002) and policy implementation. This has become particularly evident in the environmental sustainability sector, where we continue to see a growing number of intersectoral interorganizational (ISIO) collaborations designed to pool resources and leverage knowledge across professional domains. This collaborate way of "doing business" is becoming a more common practice as noted by (Koontz, 2006 15) "collaborative-environmental management...a way of governing for environmental issues, an alternative to government-centered processes, that empowers stakeholders and citizens to play a dominant role in planning and decision making." O'Leary (2006 38) notes the importance of intersectoral cooperation among individuals within the Department of the Interior and the Nevada Department of Wildlife, defining "guerrillas as in-

dividuals that have worked outside of their organization and scope of work in order to protect the environment” noting their success in saving this area may be credited to their partnerships with non-governmental agencies and that these “. . .public-private partnerships were the catalysts for the idea that water rights could be purchased for the wetlands”.

A surprising, yet promising characteristic of many of these collaborations is that more often, they are originating from within the private sector. While efforts to protect the environment are characteristic of organizations in the public and nonprofit sectors, the private sector is increasingly becoming involved. In fact, since the “early 1990s, more than 200 voluntary environmental programs have been created to promote proactive corporate environmental protection in the United States (Rivera and deLeon, 2004 417).” This entry of the private sector into the development of environmental sustainability programs raises the need for public managers to better understand the tendencies of private sector partners in terms of their relationship preferences, so that the resulting public-private partnerships can function in a such a way to reap the greatest benefit.

In order that public managers engage in strategic planning to promote and enhance their collaborative efforts, we propose here that the sector needs a greater understanding of private partners’ preferences for engaging in ISIOs and a framework by which to develop such collaborations. It is not yet clear how networks of intersectoral partners evolve to support and enable voluntary environmental sustainability programs (VESPs), particularly when mismatched missions, organizational structures, and motivations exist within the various organizations. Why should managers seek to understand networks? Every system of management - made up of methods, tools, and techniques in practice - has underlying assumptions of what ought to be the way of doing things in the organization and in relationships with other organizations. Many of these assumptions have implications in terms of how people ought to relate to other people in the various roles they play.

In much of the research thus far, the focus of research on ISIOs has been on the characteristics of organizations involved and little empirical work has been done to understand the quality of the relationships among various organizations involved in the ISIO. In this paper, we assess the network ties among multi-sectoral organizations and develop a conceptual framework by which we can empirically measure and assess intersectoral ties that may successfully enable VESPs. We develop arguments and a set of propositions that specify the dimensions of ISIO cause-based network connections and the kinds of ties we might expect as tie activity evolves. We suggest that ISIO cause-based networks among participants of environmental sustainability programs continue to be examined, thereby improving understanding of ways in which public managers can support these activities. What we learn from the firms which participated in this study, that is, those that exhibit exemplary VESPs and the way in which they form networks of resources and support, may guide public managers as they work to further develop ISIO collaborations with the private sector. For this reason, this project takes an inductive approach as an important starting place to form a foundation for future empirical research, using a cross case study design to answer the following research questions:

- *What are the preferences for partnership development and network tendencies of successful firms that they consider helpful in promoting their voluntary environmental sustainability work?*

- *What is the demographic makeup of these partnerships; what types of activities are they engaging in; and what is the quality of the partnerships?*
- *If networks are an important part of the VESP work that firms do, what are the dimensions of the networks that can be empirically tested to both improve and promote ISIO networks, particularly for public managers who are not currently engaged in public-private partnerships, but desire to do so?*

The remainder of this paper will first provide background for how collaboration has become a popular strategy to promote corporate social responsibility and how this relates to cause-based ISIO networks. We then outline the theoretical applications of social exchange framework to the study of ISIO cause-based networks, explain our methods and data (including how we operationalize ISIO network connections), describe the organizations featured in this cross-case analysis, present the data, and format a set of propositions for future research. Our conclusions and suggested propositions inform understanding of the stated research questions in an effort to promote the growth and understanding of ISIO cause-based networks by advancing the theory of collaborative public management to continue to support firm involvement in social policies such as VESPs.

Collaborative Management Requires a Better Understanding of Private Sector Preferences

Spending resources to promote public goods such as “environmental protection” with little (obvious) economic incentive is uncharacteristic of private sector organizations and the motivations for this type of action are a pressing question, particularly to public managers wishing to engage them in such activity. However, research does show that participation in corporation social responsibility (CSR) is correlated to financial incentives (Orlitzky, et al., 2003). CSR is “a business organization’s configuration of principles of social responsibility, processes of social responsiveness, and policies, programs, and observable outcomes as they relate to the firm’s societal relationships (Wood, 1991 693).” A growing number of firms have focused their CSR programs on goals supported by the environmental movement in the form of VESPs (here defined as any voluntary activity that a firm engages in that promotes environmental sustainability).

Networking is not new to the private sector, and it could be argued that they have been engaging in networks as a management strategy far longer than the public sector has, having embraced the idea of collaboration as a strategic mechanism beginning with research on joint ventures (Harrington, 1985; Kogurt, 1988), continuing with strategic blocks, strategic supplier networks, interfirm trust, and network resources (Gulati, et al., 2000). Often referred to as “the collaborative advantage” (Hansen and Nohria, 2004), working interorganizationally is considered one way to reap economic benefit. (Ireland, 2005 3) explains “these leading companies have found that collaborating as a team within the entire value chain is the best possible approach to improve the overall value chain performance.” In order to reap the anticipated advantage of collaboration however, business began its collaboration movement attempting to figure out how to strategically collaborate in ways that include “partner relationship management” and interactions that are “product or process forward” (Greenberg and Greenberg, 2006 42). Working across sectors is not as typical a

strategy for businesses. However, the business sector has developed practice that can inform ISIO networks in ways that should not be underestimated.

This traditional mindset has initiated a new interest by private sector firms to engage in partnerships with public agencies around social policy issues. While we do know that “business-NPO collaborations appear to be responding to growing demands for nonprofits and businesses to address social metaproblems too complex or protracted to be resolved by actors within a single sector (Parker and Selsky, 2004 460)”, questions regarding the network interactions within such ISIO systems is still in its infancy and abounds with unanswered questions. Research that identifies those mechanisms which motivate firms to participate in VESPs so far fail to explain the social systems in which such firms are embedded. We suggest that it is these social systems that both enable and support firms to engage in (VESPs). We define social systems as networks where actors, whether social, economic, or institutional, interact and develop social relationships and share certain expectations and values.

Intersectoral Interorganizational (ISIO) Networks

Westley and Vrenenburg (1997 383) state “we need a fuller understanding of how particular tasks, technologies, and problems shape the collaborative process and are shaped by it...our knowledge of organizations suggests that the task, technology, or competency around which an organization is shaped is critically important in determining what structures and processes work best.” In networks that promote goods that are not sector specific, the partners often come from the nonprofit, public, and more often now, the private sectors. These types of ISIO networks have been studied over many years in many contexts. The primary focus of this area of research has focused primarily on the alliance-based characteristics of firms that result in some variation of structural positioning and/or financial gain based on economics, corporate strategy, and interorganizational fields. Galaskiewicz (1985 285) labels this a focus on the “arenas of resource procurement and allocation”, followed by political advocacy and organizational legitimization. Although the emergence and evolution of interorganizational networks in this context has been explored in various levels of detail (Galaskiewicz, 1985; Monge, et al., 1998), fewer studies have focused their attention on the evolution and function of ISIO *cause-based* networks that collaborate as “a temporary social arrangement in which two or more social actors work together toward a single common end requiring the transmutation of materials, ideas, and/or social relations to achieve the end (Roberts and Bradley, 1991 212).”

Attempts to explain collective action from a group perspective have roots in sociological and economic theory (Coleman, 1990; Olson, 1971) as well as a foundation in theories of social structure to explain and understand the phenomenon that makes some efforts successful while others fail. This focus on social structure relies heavily on theories of network exchange, dynamics, and communication (Monge and Contractor, 2003). Early research on this topic found that dense groups with similar interests and resources will behave most efficiently and successfully, thereby producing the most successful collective action collaborative (Galaskiewicz and Burt, 1991). These explanations may help inform *interorganizational* collaborations of a certain type, that is, those that include members with sim-

ilar characteristics and goals, and levels of resource availability whose overall mission is similar. However, it is questionable whether the same findings apply when the group characteristics differ. These types of heterogeneous collaborations are increasingly common as intersectoral partnership evolve, that is those that blend members from the public, private, and nonprofit sector to achieve a common goal. The resulting impact on ISIOs is a mix of mission, resource availability, status, size, financial stability, and value system between organizations cumulatively trying to work towards a collective goal.

Contrary to research that supports the growth of a network and interorganizational partnerships, some purport that given the option, organizations would prefer not to engage in interorganizational relations due to a resulting constraint on their subsequent actions (Burt, 1992; Galaskiewicz, 1985). We should not assume that networks are intrinsically beneficial, particularly for corporate firms. As exchanges become less rewarding or when interactions become less important, the likelihood of checks on accountability and reliability have the possibility of decreasing (Monge and Contractor, 2003). Additionally, the threat that over-embeddedness, leading to reliance on trust rather than skill, and the “Law of N-Squared” which suggests that as network ties increase in number, they run the risk of overwhelming the ability of its members to actively participate in the network are also potential setbacks for network designs (Krackhardt, 1994). Leach et al. (2002 650) note “Critics assert that partnerships consume excessive amounts of time and effort, create new and unnecessary layers of bureaucracy, divert attention away from important problems, give false legitimacy to parochial deliberations when regional or national interests are at stake, and reward government agencies for making popular decisions rather than sound decisions.” On the other hand, networking with diverse partners has been found to increase resource allocation and choice options, which in a governance community can increase the level of discursive democracy and policymaking (deLeon, 1997; deLeon, 1995; Granovetter, 1973; Granovetter, 1985).

Social Exchange Framework

To further understand the preferences of private sector firms willing to engage in social policy (in our example VESPs), we employ a social exchange framework. This framework has its roots in exchange theory (Homans, 1964; Homans, 1958; Homans, 1961), which explains the likelihood of dyadic (two partner) relationships based on the supply and demand of resources that each member of the dyad has to offer. Social exchange theory views the exchange relationship between two actors as “actions contingent on rewarding reactions from others” (Blau, 1964 91). In Homans’s (1958 606) own words “social behavior is an exchange of goods, material goods but also non-material ones, such as the symbols of approval or prestige...persons that give much to others try to get much from them, and persons that get much from others are under pressure to give much to them”. We break down social exchange theory in this context to explore the elements of trust, power, reciprocity, and homophily between dyads (partners) in ISIO networks.

Trust and Formality

Trust in an exchange network is based on commitment to others without a full disclosure of

their will to reciprocate. According to Burt and Knez (1996), trust entails committing to an exchange prior to gaining knowledge of the others' will to reciprocate. Therefore, partnerships and exchanges in *new* relationships may influence the level of trust between a pair of organizations. Alternatively, longstanding or embedded partnerships have a greater chance of being trusted. The evolution of network ties exhibit varying degrees of formality which influence trust, including contractual agreements, regulatory guidelines, procedural processes, and informal exchanges. The level of formality of a relationship can influence the amount of trust between dyadic ISIO relationships. Gulati and Singh (1998) found that as trust develops between partners, the level of formality decreases leading to the assertion that "familiarity breeds trust." Isett and Provan (2005) found that this principle did not apply in a "public network" setting and that instead formal ties tend to be maintained over time (regardless of varying levels of trust). Although formal ties remained primarily stable in their study, this did not preclude the addition of informal ties to the dyadic relationships. It is unclear in an ISIO network, whether the formality of ties will digress over time as trust increases. Isett and Provan (2005) provide a wide array of explanations for why ties remained formal in their networks, including the need to formalize relationships through contracts in order to meet public reporting requirements. In an ISIO, it is unclear whether the use of contracts is more likely to be present or not and whether the interactions between intersectoral partners increases or decreases the likelihood of formal relationships. In this paper, we operationalize trust among partners as indicated by the number and types of partnerships they engage in, the length of the partnership, and whether any financial exchange is included in the exchange.

Power

Power is generally characterized by the balance of resources, their availability and control. In the social exchange framework, power is the property of a relation and not a particular actor, because it "resides implicitly in the other's dependency" (Emerson, 1962: 32). Carroll and Teo (1996) found that managers were more likely to prefer wider networks to increase their resource diversity, regardless of any potential power imbalance. The possibility of power imbalances however, may threaten the success of an ISIO cause-based network. A more "powerful" partner may overwhelm a "weaker" partner in program development and change the outcome entirely. If for example, a private firm wants to start a program with a nonprofit, the nonprofit may have to succumb to the desires of the more financially stable firm, and may lose part of its voice. Private firms may be considered more powerful because they often have more stable resource streams than do public and nonprofit organizations, however the latter group may have greater influence on social issues because of their history of involvement in these areas. It is difficult to generalize power balance issues in ISIO cause-based networks. A general assumption that we work under in this paper is that power is more likely to be balanced when partners are from similar sectors (e.g. more balance between private-private versus private-nonprofit partnerships). We classify partnerships as being power imbalanced if they are a "mixed sector" partnership. In network terminology, we would describe this possible imbalance a little differently. Private agencies are inclined to seek out positions of centrality in order to gain some kind of structural benefit over being in the "center of things" while public agencies are more likely to position themselves to in-

crease their connectivity because it is common that to “accomplish their organizational goals, the agencies must either develop multiple services on their own or coordinate their existing services with other organizations,” creating a joint production function (Isett and Provan, 2005; Milward and Provan, 2000). We assume that it is these conflicting goals that cause a power imbalance.

Homophily

Homophily is a network theory that explains network connections by linking similar characteristics of the network members. Here, organizations with similar characteristics will be more likely to develop partnerships. Hannan and Feeman (1977) refer to this homophily as “competitive isomorphism” that arises from similarity of resource niches and environmental demands which often facilitate joint operations (Chung, et al., 2000). Shumate, Fulk, and Monge (2005) assert that “past alliance studies have found that organizations with status similarity tend to form relationships.” However in their research of HIV-AIDS international nongovernmental organizations, no significant predictors of alliance among international nongovernmental organizations across any time periods were found based on similarity of organizational type. They (Shumate, et al., 2005) suggest that “perhaps a more comprehensive indicator of homophily is needed, including such factors as organizational size, membership demographics, and amount of funding (502)” to more precisely serve as an indicator of the link between homophily and network formation.

Reciprocity

Although reciprocity is a primary dimension of social exchange theory, we suspect that reciprocity may be less important in an ISIO cause-based network than in single sector networks because there are instances when the exchange need not be initiated by both partners in a dyad. In exchanges that are based on resource dependency, it is expected that people out to return benefits given to them in a relationship (Gouldner, 1960). In an ISIO cause-based network, there are many partners that need only receive benefits (e.g. education). For example, if a firm is getting information from an advocacy group, then they need only retrieve the information without needing to establish a tie that includes reciprocity. Most partnerships in ISIO cause-based networks are not formed as a function of resource dependency. Rather, they are formed because others have information that firms don't have and this information helps them develop better programs – a sort of resource opportunity. These exchanges produce outcomes that affect a public good, and therefore the balance of maximization plays a very different role than it would in a financially explicit exchange.

Summarizing the Framework

In ISIO cause-based networks, we expect the effects of network characteristics to interact with the levels of trust, power, and reciprocity in a system. The fact that a good is collective or shared does not mean that all those individuals who are interested in it are the same. In fact, ISIOs differ in magnitude of interest, in-house resources (time and money) objectively available, and mission. In this paper, we use the social exchange framework to de-

scribe the networks of firms with exemplary VESPs and to create a set of propositions for future testing to understand and support evolving networks that support VESPs.

The following table summarizes what we know about interorganizational networks within the network exchange framework, but indicates that there is uncertainty in ISIO cause-based networks.

Table 1. Network Exchange Theory of ISIO Cause-Based Networks

	Private-Private	Public-Public	ISIO
Trust	Informal	Formal	??
Power	Balanced	Balanced	??
Reciprocity	Required for Mutual Financial Benefit	Mutual Benefit of an In-Kind Nature	??
Homophily	Likely	Likely	??

Data and Method

Our research was a mixed method cross case analysis of seven firms recognized for their participation in VESPs. We focus on these private sector organizations as a way to identify preferences so that public sector managers can better strategize for how to form such partnerships. We included firms for this study from the service industry in Colorado nominated as environmental leaders by members of the Advisory Board of the Wirth Chair for Environmental and Community Development Policy in 2004 and 2005. The Wirth Chair was created in 1993 in the Graduate School of Public Affairs at the University of Colorado in Denver to honor Tim Wirth, former U.S. Senator from Colorado for his commitment to the environmental sustainability. This program offers three awards per year to companies nominated by community members and selected by the Wirth Chair Advisory Board.¹ We include seven firms and collected information about the networks of ISIOs that support or enable their VESP work.

The mixed methods cross case analysis allowed us to focus on detail and depth. Case studies are among the most effective methods of exploring questions that we know little about *and* can evaluate the effectiveness of a project by highlighting the conditions, processes, facilitators, inhibitors and key issues. However, this approach only addresses a single project or a specific program. It does not provide a framework for comparing and con-

¹ The Wirth Chair Board members consist of citizens, public interests and community groups, media, non-profit groups, government agencies and business firms. Community members nominate stories, individuals, projects and plans committed to promoting environmental sustainability and the Advisory Board selects nominations for awards. There are five winners annually, one for each environmental story printed and taped (Media Award), two for either individuals or organizations committed to protecting the local environment (Community Award), and one for the environmental project and plans committed to promoting sustainable environmental practices and management of businesses (Business Award).

trasting the outcomes of similar organizations that share a similar profile and objective. By deploying a cross-case analytical framework, we can evaluate the ISIO network structures by looking for patterns and themes in the data that are common across projects. This approach also allows us to analyze discrepancies in notable outcomes or attributes and their contributing factors. This type of analysis also allows the researcher to communicate the success and failures of organizations with similar objectives. Additionally, cross examination of the organizations with similar profiles but different attributes will allow for diverse ways of conceptualizing the outcomes of ISIO cause-based networks. As part of the cross-case analysis, we apply a mixed method approach consisting of interviews, surveys, and content analysis.

The objectives of this analysis are to:

- Identify and document the key issues characteristics of organizations involved in ISIO cause-based networks
- Analyze the relationships between the key issues to look for patterns
- Demonstrate the importance of a comparative analytical model to develop a set of propositions to guide future research

From the list of 15 private firms nominated for a Wirth Chair Award in 2004 and 2005, seven agreed to participate in the study. Table 2 details each company, its size, the year established, its primary purpose, and any environmental practices they engage in.

Table 2. Summary of Firms, Type, Size, Year Established, Purpose, and Practices

	<i>Size</i>	<i>Year Est.</i>	<i>Environment=Primary Purpose of Company?</i>	<i>Environmental Practices</i>
<i>Firm 1</i>	250	1967	NO	<i>Environ Auditing & Reporting, Recycled Material Use, TQM, Clean Technology, Renewable Energy Purchase, Stakeholder Involvement, Indoor Environ Quality</i>
<i>Firm 2</i>	80	1999	NO	<i>Recycled material use, Environ Manag System, Clean Technology, Renewable Energy Purchase, Stakeholder involvement in product design</i>
<i>Firm 3</i>	4	2003	NO	<i>Environ Manag. System, Clean Technology, Renewable Energy Purchase, Biodiversity Audit</i>
<i>Firm 4</i>	11000	1975	YES	<i>Environmental Auditing & Reporting, Recycled Material Use, TQM, Environmental Management Systems, Clean Technology, Renewable Energy Purchase, Stakeholder Involvement</i>
<i>Firm 5</i>	12	2001	YES	<i>Renewable Material Use, Renewable Energy Sales</i>
<i>Firm 6</i>	3400	1946	NO	<i>Environ Auditing & Reporting, Recycled Material Use, Environ Management System, Clean Technology, Renewable Energy Purchase, Stakeholder Involvement</i>
<i>Firm 7</i>	3	1992	NO	<i>Environ Auditing & Reporting, Recycled Material Use, Total Quality Management, Clean Technology, Renewable Energy Purchase, Stakeholder Involvement in Product Design</i>

*Firms 1-7 are all private sector organizations.

In addition to in-depth interviews and a survey administration, content analysis of each firm's websites and informational literature was examined. The interviews and content analysis was conducted to get an in-depth understanding of the firms' missions, organizational structures, environmental sustainability work, and partnerships. The survey instrument was

designed and used primarily to collect information about the partnerships that these exemplary firms engage in to promote their VESPs. Partners were identified when a firm answered the survey question, “Please list any organizations with whom you have interacted with in regards to your company’s initiatives or programs for promoting environmental sustainability, whether informally or formally.” Firms were then asked to detail the duration, frequency of contact, context, resource exchange, and success of the partnerships. This paper focuses primarily on the partnerships described by firms, their content and characteristics, leading to a better understanding of the private sector preferences as a means to inform the public management literature on engaging in collaborative management strategies.

Findings of Cross Case Analysis & Propositions

Research Question 1:

What are the preferences for partnership development and network tendencies of successful firms that they consider helpful in promoting their voluntary environmental sustainability work?

One of the first tasks in this research was to get feedback from firms involved in VESPs to ascertain the level of interest in engaging in ISIO cause-based networks to do their work to answer our first research question, “*What are the preferences for partnership development and network tendencies of successful firms that they consider helpful in promoting their voluntary environmental sustainability work?*”

The seven firms listed a total of 62 partnerships with 51 other organizations. The number of partnerships per firm ranged from 3-12. Each of the seven firms expressed the desire to form partnerships and all indicated that partnerships from multiple sectors support and enhance their VESPs. Although the negative effects of networks (described above) may persist, we proceed in this paper under the assumption that firms desire partnerships as part of their VESP activities.

Research Questions 2 & 3:

We apply the network exchange framework as the basis to answer our remaining two research questions:

- *What is the demographic makeup of these partnerships; what types of activities are they engaging in; and what is the quality of the partnerships?*
- *If networks are an important part of the VESP work that firms do, what are the dimensions of the networks that can be empirically tested to both improve and promote ISIO networks, particularly for public managers who are not currently engaged in public-private partnerships, but desire to do so?*

To explore how partnership ties in ISIO cause-based networks fit within the network exchange framework, and the accompanying theories of trust, power, homophily, and reciprocity, we first explored the characteristics of the partnerships detailed by looking at the them comparatively across size, year established, mission, number and types of ties, and the context of the partnerships to answer the second research questions:

- *What is the demographic makeup of these partnerships; what types of activities are they engaging in; and what is the quality of the partnerships?*

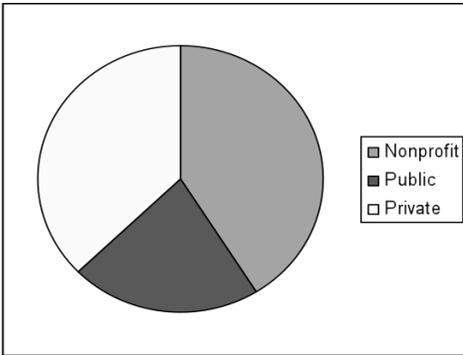


Figure 1. Sector Partnerships

Cumulatively, the seven firms listed 62 network partnerships ($n=62$), 90 percent of which have been partnerships for over two years. Forty two percent of all partnerships are with nonprofit organizations, 21 percent with public and 36 percent with private organizations, illustrating an inter-sectoral quality (See Figure 1). The fewest number of partnerships were same-sector partnerships (private-private), indicating a preference to engage in multi-sectoral partnerships.

The most common types of relationships included information exchange, program development, or utilization of services (see Figure 2). These are followed by guidelines/ standards development and finally by accessing websites and tool development. Broken down further (Figure 3) the types of ties by sector partnership is clearer. Although the majority of ties are with nonprofits, these ties consist mainly of accessing a website.

We might then assume that these kinds of partnerships are different from the other ties, in that reciprocity is less important, although the action of accessing the website it-

The most common types of relationships included information exchange,

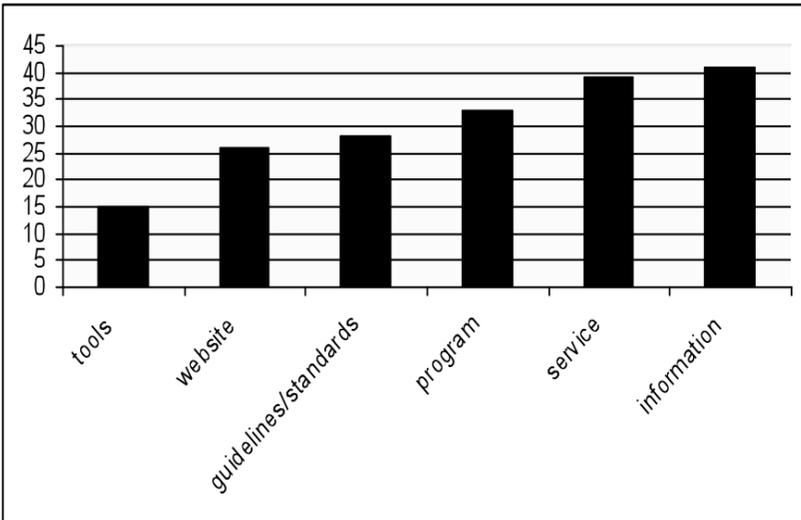


Figure 2. Types of Ties

self might be very important and informative in their program work. More reciprocal partnerships like those that require developing programs, guidelines/standards, and utilizing a service might be ties that are more difficult to maintain. Figure 3 shows that all three sectors are active in information exchange, the private sector is far more active than other sectors in providing services, and that the public sector is the most active in developing guidelines/standards. Program development is more common in the public and private sector, than in the nonprofit sector ties. This leads to our first set of propositions:

Proposition 1a: *ISIO cause-based networks will have a large number of partnerships with nonprofit organizations, although these partnerships will be less reciprocative than public or private sector partnerships.*

Proposition 1b: *ISIO cause-based networks will have the fewest number of public sector partnerships, although these partnerships will take more time to maintain because they involve more guideline/standards development and compliance than other sector partnerships.*

Proposition 1c: *ISIO cause-based networks will see the greatest activity among private sector partnerships in the form of services utilized/exchanged.*

Proposition 1d: *All types of organizations in an ISIO cause-based partnership participate evenly in information sharing and program development (there is no tendency toward one sector being dominant in this area).*

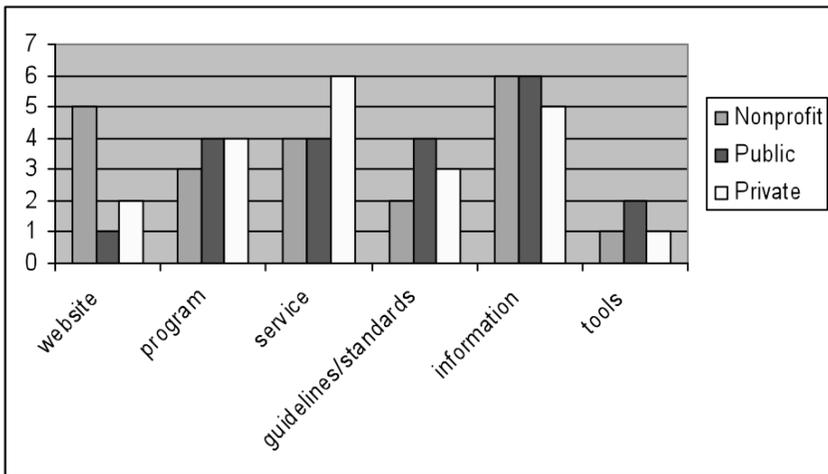


Figure 3. Ties by Sector

In the table below (Table 3) the number of ties, organizational diversity of partnerships, and types of ties per firm is detailed. Those that had at least twenty percent of their ties in any one type are bolded.

Table 3. Descriptive Statistics of Ties by Firm

	Size	Year Est. Pre-1990?	Environment-Primary Purpose of Company?	# of Ties	Types of Ties	Average # of Types of Ties	Website (%)	Program (%)	Utilized Service (%)	Guideline Standards (%)	Info Exchange (%)	Tool Development (%)
<i>Firm 1</i>	Midsize (250)	YES (1967)	NO	12	8% Public 58% Private 33% Nonprofit	4.5	18	17	22	15	17	11
<i>Firm 2</i>	Midsize (80)	NO (1999)	NO	12	33% Public 44% Private 22% Nonprofit	2.5	0	8	33	17	33	8
<i>Firm 3</i>	Small (4)	NO (2003)	NO	8	13% Public 36% Private 50% Nonprofit	6.4	24	29	19	19	5	5
<i>Firm 4</i>	Large (11000)	YES (1975)	YES	7	57% Public 43% Nonprofit	2.6	11	17	17	17	28	11
<i>Firm 5</i>	Small (12)	NO (2001)	YES	3	67% Public 33% Private	3.1	0	29	29	0	43	0
<i>Firm 6</i>	Large (3400)	YES (1946)	NO	7	8% Public 42% Private 50% Nonprofit	2.1	0	19	15	19	42	4
<i>Firm 7</i>	Small (3)	NO (1992)	NO	9	20% Public 10% Private 70% Nonprofit	4.3	19	16	23	14	19	9

*Firms 1-7 are all private sector organizations.

These descriptions illustrate the importance of networks to VESPs. The descriptions above show the diversity of these network ties and the most common types of activities that partners engage in. To answer the final research question, we look a little more deeply at the quality of the ties reported in this case analysis within the network exchange framework:

- *If networks are an important part of the VESP work that firms do, what are the dimensions of the networks that can be empirically tested to both improve and promote ISIO networks, particularly for public managers who are not currently engaged in public-private partnerships, but desire to do so?*

Trust and Formality

Trust and formality is often operationalized in networks by proxy measures such as the number of activities partners are willing to engage in, the length of the partnership, the frequency of interactions, and the act of formally exchanging money (Isett and Provan, 2005; Leach, et al., 2002). Here we operationalize the trust and formality of ties by constructing an index of trust and formality which include elements of the variables listed above. Points are credited and weighted based on these variables. Leach et al (2002) note “when constructing indexes to generate ordinal data, the choice of which items to include in the index is generally much more important than the choice of weights.” Here we utilize three variables: the length of the partnership, number of activities, and resource exchange. The index labels more trusting ties as those that are longest, have the most number of activities, and do not include a financial exchange. Therefore, the index identifies highest scores as most trusted and is outlined as:

1. Is the partnership over two years old? If Yes add 1 point; If No add 0 points
2. How many activities do the partners engage in? Add 1-6 points (one for each of the six activities)
3. Is there a financial exchange? If No, multiply by 1 point; If Yes, multiply by .5

This index produced a range of scores that describe the various levels of trust from 1-7, with 7 being the most trusted relationships. Although some partnerships had very trusting partnerships (high scores, close to 7), there were some that had relatively low trust scores. However, the mean trust score was 3.48 with a standard deviation of 1.8. We conclude from these frequencies that there is a balance of trust within ISIO cause-based partnerships, with the following proposition:

Proposition 2: ISIO cause-based networks do not tend to contain overly trusted or non-trusted partnerships, but instead exhibit a balance of overall trust based on length of partnerships, types of interactions, and financial exchanges.

Sine 90 percent of ties have been established for two years or longer, it is likely that once successful ties are established in an ISIO cause-based network, companies tend to keep those partnerships ongoing. It is often assumed that after costs are paid to establish a basic connective infrastructure the marginal costs of adding more network linkages will be constant if not decreasing in magnitude (Monge, et al., 1998). For this reason, it may be possible for firms to establish wider networks while maintaining their ongoing ties with little to no extra costs. Hence, there tends to be a great deal of stability in these networks. This is an important observation, and one that should not be surprising. It is a norm in all sectors to minimize costs and therefore, developing long-standing partnerships may be more strategic than otherwise, or there may in fact be a longevity factor in ISIO cause-based networks. If networks of this sort can be maintained and stabilized, it may illustrate a bright future for ISIO cause-based networks, and in this case, a boost for other firms trying to improve their VESPs by tapping into established networks. This leads us to our next two propositions:

Proposition 3a: ISIO cause-based networks form ties that are lasting and stable, as indicated by the depth (length) of their partnerships.

Proposition 3b: Stable and lasting networks lead to greater involvement of firms in ISIO cause-based networks through the low-cost mechanism of introducing new network members into an already established network.

Power

As mentioned previously in this paper, power is generally characterized by the balance of resources, their availability and control. Although Carroll and Teo (1996) found that managers were more likely to prefer wider networks to increase their resource diversity, regardless of any potential power imbalance it is important to consider the effect of power imbalances in an ISIO cause-based network. Interviews with the firms in this study indicated that power imbalances generally did not exist among partnerships, even though most partnerships were cross-sector partnerships. Most interviewees spoke instead about the balance of interests as the driver for partnerships and the diversity of resources as influential in choosing partnerships. Because the outcomes of the partnership rarely results in explicit financial gain of one partner over another, competition is minimized. Past research has fo-

cused on the differences among intersectoral partners as indicators of power imbalance, but here we focus instead on the quality of the tie. Therefore, a partnership in an ISIO cause-based network between private-nonprofit organizations does not in its own right define a power imbalance. Power imbalance instead should be evaluated based on the resources and financial exchanges, coupled with elements such as trust. The evidence from the in-depth interviews indicates that power balances are present in these ISIO cause-based networks, primarily because of the collective good that is the anticipated result of the partnerships. Therefore, we offer this proposition:

Proposition 4: ISIO cause-based networks evolve and function with power balances, as a result of their mission-driven purpose and lack of competition to achieve the ultimate goal.

Homophily

Prior research indicates that organizational type accounts for a variation in interorganizational relations (Aiken and Hage, 1968; Aldrich and Whetten, 1981; Blau and Rabrenovic, 1991; Galaskiewicz, 1979; Galaskiewicz, 1985). In this research, the ways in which we have categorized organizational types is by sector identification, mission, size, and date of establishment. A general assumption is that larger organizations may have more interorganizational transactions compared with other organizations (Blau and Rabrenovic, 1991). It is difficult to discern patterns among these ties from Table 3, although we do note that the two firms whose primary product is an environmental sustainable action have public organizations as their largest number of partnerships, perhaps because they are involved in more compliance activity (voluntary included). In the interview with one of these firms, it was evident that their partnerships with the EPA and other public organizations and the services they provided such as consulting, standards, protocol development, and accreditation were of primary importance to maintaining a VESP. Also of note is that the smallest firms often engaged in a greater number of activities with their partners (averages ranging from 3.1 to 6.4), while the two largest organizations identified less activities in their partnerships (2.1 to 2.6). This means that smaller firms said they engaged in more activities with their partners than did the larger firms.

Gulati (1995) found that firms are most likely to form ties with their existing partners and with their partner's partners. However, network theories often find that diversity of ties increases the ability of a firm to participate in networks because they do not have the resources in-house (Burt, 2001). The diversity of partnerships that is, the lack of same-sector partnerships challenges the principles of homophily, that firms will partner with those most like them. Rather, we see the highest degree of partnerships with other-sector (non-profit and public) partners in the ISIO cause-based partnerships that participated in these studies leading to the next proposition:

Proposition 5: Firms engaged in ISIO cause-based networks seek out diverse partners that are members of other-sectors such as public and nonprofit organizations to increase their resource/knowledge capabilities.

Conclusion

The rise of corporate socially responsible activity among firms, evident as voluntary par-

ticipation in cause-based movements, has ignited a myriad of questions. A large amount of literature has been conducted that looks at what motivates firms to participate in this type of activity, particularly when it may be deemed uncharacteristic of the firm to do so. Fewer studies have focused on the emerging social systems of firm relationships with intersectoral partnerships. In this paper, we applied the social exchange framework to explore and understand the types of network ties that have emerged thus far amongst ISIO cause-based networks of exemplary firms engaging in environmental sustainability programs, in an effort to inform the collaborative management literature. In order to build effective networks we need to first understand how networks evolve and change over time. Koka et al. (2006) found that the environment affects patterns of observed network change in predictable ways. Most research on interorganizational networks focuses on networks in the context of uncertainty and change. In cause-based networks, formation of ties does not happen because of uncertainty as much as for mission-driven results.

It may be argued that ISIO cause-based networks are atypical of documented private sector culture and that instead, they exist in an emergent culture. An emergent-culture approach to understanding cause-based networks implies a symbolic interactionist definition of culture as “historically situated and emergent, shifting and incomplete meanings and practices generated in webs of agency and power” (Ong, 1987) as cited in (Parker and Selsky, 2004)). Parker and Selsky (2004) present a framework for emerging cultures that occurs as three types. The first, integration includes a synchronization that mixes cultures and is dominated by low trust and power imbalances. Although they refer to this state as “harmonized cultures” that promote the social cause and each organization’s objectives, there is still an autonomy of sector culturizations that keep the network from fully integrating, hence leaving the door open for low trust and power imbalances. The second type is reculturation (or “interculture”) includes new cultural practices drawing on each norms from each type of other, but different from both in the end. This type of culture is characterized by vague parameters, high degrees of interdependence, and a complex structure that can only be managed when partners perceive balance and reciprocity in the relationships. Parker and Selsky (2004) find the advantage of this stage to include the possibility that learning can lead to new cross-sector relationships by reducing reliance on any one partner and may cumulatively help participants sustain a balance of powers. The third type is a sense of separation (or polarized cultures) characterized by loose boundary spanners, low power struggles with no one partner having dominance, high trust, and good will. Whereas most of the policy literature characterizes termination, or separation, as some kind of failure, a cause-based framework views the failure simply as one partner’s attempt to preserve its cultural practices through self-imposed segregation from a partner (Elsass and Viega, 1994). In fact, Parker and Selsky (2004) suggest that instability may reflect a shifting power balance that can improve performance of partnerships.

We argue here that an emergent culture does exist for ISIO cause-based partnerships, as is evident by our cross-case analysis. Although we do not assert that these findings are generalizable and instead recommend that they be empirically tested in future research, we do assert some general propositions that have logically been derived from this study. Previous research suggests conflict among intersectoral partners with a chance for low levels

of trust and high power imbalance. Other research suggests that organizations prefer to partner with others like themselves, to alleviate these issues. We found instead in this study that power balance, coupled with moderate levels of trust and diverse partnerships were the dominant characteristics of cause-based ISIO networks of firms that have exemplary VESPs.

Balanced, trusting networks have the potential to be the most successful (Burt, 2001; Burt, 1992) at achieving their goals. It may be that cause-based networks are at their highest performance when they are intersectoral, that is, integrating information exchange, program development, and guideline/standards development from a diverse set of players. The firms included in this study asserted a strong tendency for networking and showed no strong preference for staying within sector – and welcomed the opportunity to partner with the public and nonprofit sectors. Although the types of relationships vary among sectors, it is the whole set of relationships, the diversity and balance among them that suggests success.

Public managers who are seeking engagement in ISIO cause-based networks are interested in understanding how firms with exemplary practice form these networks. With the findings from this research, public managers may better understand what to expect, and therefore how to strategize, to further engage partners from multiple sectors. Private firms acknowledge the benefit of working with public agencies and nonprofit organizations, to reach the common goal of improving environmental sustainability. As an interviewee at one firm pointed out, “In the world of environmental sustainability, the work done is not truly sustainable unless a company crosses the spectrum of impact including the social, environmental, and economic impact of sustainable activity.”

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