

**Enhancing Public Sector Innovation:
Examining the Network-Innovation Relationship**

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ABSTRACT

Communities around the country are facing an increasing number of problems for which traditional government action is failing. This has led to a growing realization that the public sector must increase its capacity to innovate. In an effort to do so, the public sector has increasingly turned to networks of public, private, and non-profit organizations. While a considerable body of academic research has examined the relationship between collaboration and innovation, the research has focused primarily on the network's capacity to generate new ideas. Recognizing that innovation is a dynamic and iterative process, which includes the generation, acceptance, and implementation of a new idea or approach to an issue, we argue that previous studies have provided for a somewhat limited understanding of this relationship. Consequently, these studies have provided little to no practical guidance for public managers. To address this gap in the literature, the present study makes a first step in the development of a management perspective on the relationship between collaboration and innovation. In doing so, we present an exploratory case study of the Texoma Regional Consortium, a regional partnership that brought together Texas and Oklahoma workforce development efforts, that suggests the design, development, and institutionalization of specific mechanisms (integration, dialogue, and coordination) to facilitate the use of the network form of governance for the specific purposes of public sector innovation.

Keywords: Innovation, Network, Governance, Knowledge, Network-Innovation Mechanisms

Introduction

Communities around the country are facing an increasing number of problems for which traditional government action is failing (Golden, 1990). Consequently, it has become commonplace for one to hear that public sector organizations are operating in a more unstable and volatile environment than at any time in history. This has led to a growing realization that the public sector must increase its capacity to innovate. Scholars often cite the need for innovation as a major reason for the emergence of the network form of governance (Goldsmith & Eggers, 2004; Keast et al., 2004; Kettl, 2002; Kickert et al., 1997; Osborne & Brown, 2005; Swan & Scarbrough, 2005). In this study, we use the term network form of governance to encompass all types of collaboration that bring people and their organizations together to address the complex problems facing communities (Weiss et al., 2002).

Successful innovation represents the completion of a three-stage process: idea generation, acceptance, and implementation (Shepard, 1967). To date, the literature has primarily focused on the network's capacity to generate new ideas (Goes & Park, 1997; Hardy et al., 2003; Swan and Scarbrough, 2005). This has provided for a somewhat limited understanding of the network-innovation relationship. As noted by Van de Ven et al. (2000: 3), "innovation requires more than the creative capacities to invent new ideas; it requires managerial skills and talents to transform new ideas into practice." Due to the limitations of previous studies, the skills to facilitate and

manage the entire innovation process, within networks, remain somewhat underdeveloped.

To address this gap in the literature, this article reports on an exploratory case study in which we observed the network-innovation relationship extensively. The central purpose of this study is to address the following questions: What is the relationship between the network form of governance and innovation? How can networks be managed to address the obstacles to innovation posed by the network form of governance? We found that networked innovation requires the design, development, and institutionalization of several processes that help facilitate the completion of the innovation process. We call these processes *network-innovation mechanisms*. To offer some practical guidance for public managers, we identify and illustrate several network-innovation mechanisms from the Texoma Regional Consortium.

Conceptual Framework

The concept of innovation has generated a vast amount of research. Yet, to date there is little to no consensus upon a definition (Damanpour, 1996). This does not necessarily reflect a weakness or defect in past research, but it does highlight the importance of understanding and defining innovation within a particular context. Two key aspects of this study create the context for this discussion: 1) this study's focus is public sector innovation and 2) this study is interested in innovation at the inter-organizational or network level. Within this context, this study draws from several authors to define innovation as:

the generation, acceptance, and implementation of a new idea or approach to an issue, among social actors, that challenges the prevailing wisdom as it advances the public good and creates public value (Hannah, 1995; Light, 1998; Shepard, 1967; Osterlund & Carlile, 2005; Robertson et al., 2007; Van de Ven, 1986; Van de Ven & Angle, 2000).

To capture the essence of this definition, one must recognize the dual nature of this concept; that innovation is both a process and an outcome. Previous studies have tended to separate the different aspects of innovation. However, a better understanding of each is an important first step to understanding the network-innovation relationship.

Public Sector Innovation: An Outcome

Two important outcomes or expectations serve as a reminder of the ultimate rationale for public sector innovation. First, *innovation within the public sector should represent a new idea or approach to an issue, which challenges the prevailing wisdom* (Light, 1998). Becker and Whisler (1967) argue that innovation is literally the "first use" of a new idea or approach. Likewise, as Laurence Lynn defines it, innovation must be "an original disruptive act" (Light, 1998: xv). This is an important distinction. Past studies have tended to define innovation as whatever is new to a given organization (Mohr, 1969; Shepard, 1967; Zaltman et al., 1973). When a public sector organization copies an innovation from another organization, that organization should not be deemed innovative. As noted by Paul Light (1998), this is merely an act of replication, not innovation. Considering the growing complexity of public problems, replication may not be enough.

Second, *innovation, within the public sector, should accomplish two things: 1) advance the public good and 2) create public value*. Innovation, within the public sector, is just too

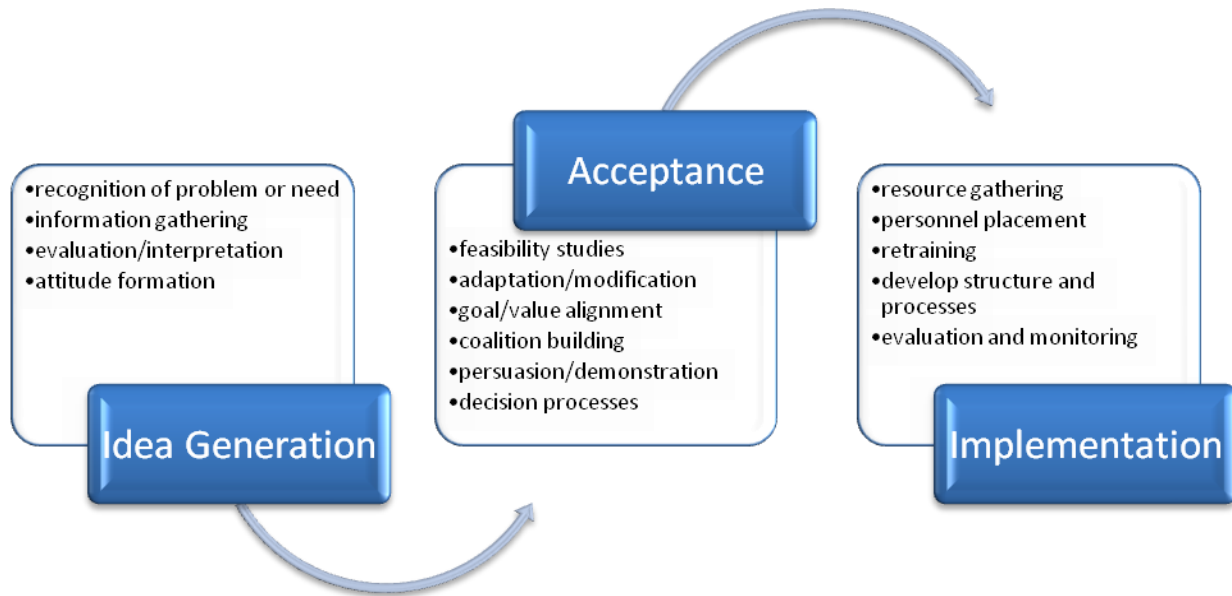
expensive and time-consuming “to be defined as mere novelty” (Light, 1998: xv). As Paul Light (1998: xv) indicates, “whereas in the private sector an innovation simply needs to be profitable to be worth doing, in the public sector innovation must be about doing something worthwhile.” If a given act saves money but a segment of the population suffers as a result, it should not be labeled as an innovation. To do so, is to define innovation downward. Moreover, the creation of public value must be based on sound evidence that an innovation is likely to work. The potential costs of a failed innovation in the public sector are likely to be far greater than in the private sector. In the public sector, when an innovation fails a segment of the public is likely to suffer as a result.

Public Sector Innovation: A Three Stage Process

As stated previously, innovation represents the successful completion of a three-stage process: idea generation, acceptance, and implementation (Shepard, 1967). When examined more closely, the processual nature of innovation provides a framework for enhancing our understanding of how “innovations emerge, develop, grow, or terminate over time” (Van de Ven et al., 2000: 4). As outlined by Hannah (1995), ideas are generated through various personal or environmental stimuli in which individuals can play a number of different roles from initiator to champion to critic. New ideas are then modified and shaped by various stakeholders, organizational routines, and external pressures eventually leading to a decision to accept or reject them. Once a new idea is accepted, the necessary resources and personnel must be gathered and put into place to implement them (Damanpour, 1991; Hannah, 1995). Figure one provides an overview of the different types of activities that may take place at each stage of the innovation process (Damanpour, 1991; Damanpour, 1996; Klein & Sorra, 1996; Pierce & Delbecq, 1977; Shepard, 1967; Van de Ven, 1986).

For ease of understanding, the innovation process has been presented in a linear fashion. However, it typically plays out in more dynamic and iterative patterns where the different stages may overlap and merge into one another (Hannah, 1995; Shepard, 1967; Van de Ven, 1986). This represents a significant challenge for public managers who are responsible for both managing the innovation process and ensuring that its outcomes meet the unique expectations of the public sector. The following sub-section will review this literature to highlight the limitations of previous studies and introduce a new way to understand and approach the innovation process.

Figure 1: The stages of the innovation process



Previous Studies and their Limitations

In *Bureaucracy and Innovation*, Thompson (1965) was one of the first authors to consider the obstacles to innovation within the bureaucratic organization and to offer some suggestions for changes that would facilitate innovation. This has led to an increasingly large amount of scholarly effort that has sought to identify the various organizational conditions that increase the likelihood and frequency of innovation. Despite these efforts, the findings remain somewhat scattered and provide a limited understanding of the innovation process. This has contributed to an un-workable solution for public managers.

In *Innovation and Organizations*, Zaltman et al. (1973) argue that an “organization must shift its structure as it moves through the various stages of innovation.” The authors suggest that a more organic or less bureaucratic structure seems most appropriate for the generation of ideas. Then as the organization moves toward the implementation stage, more structure is necessary. Pierce and Delbecq (1977), argue that the successful completion of each stage of the innovation process seems to call for different attitudes, strategies, and structural conditions. In summary, an organization should be more open, diverse, and decentralized for the idea generation stage. Then as it moves to the acceptance and implementation stages, the organization should be more closed, centralized, and increasingly formalized (See Table 1). We refer to this as the structure-based view of innovation and we question whether this type of un-structuring and re-structuring is even possible.

Table 1: Organizational conditions thought to facilitate innovation

Stage	Organizational Conditions	Environmental Impact
Idea Generation	Open/Diverse Decentralized/Participatory Culture Structural Looseness /Low Formalization	Increased Access to Knowledge & Information Empowers/Legitimizes Multi-Level Participation Lateral Communication Enhances Creativity Growth in Professional Relationships
Acceptance	Singleness of Purpose/Closed Centralization	Limits Conflict and Facilitates Commitment Bounded Communication Identifies Authority
Implementation	Formalization/Tightened Control	Specify Tasks, Roles, Responsibilities Areas of Specialization Limits Experimentation

Previous studies do not adequately account for the dynamic and iterative nature of the innovation process. This is largely due to the false assumption that each stage of the innovation process is distinctly separate from the others and occurs at different times with little or no overlap (Pierce and Delbecq, 1977). Moreover, these studies tend to overlook the collective and social aspects of the innovation process. Innovation, however, as stated by Cummings and van Zee (2005: 14), “has to be approached as a process of interplay among social actors from relevant social practices.” Reflecting this understanding, there are two key characteristics of the innovation process that warrant further consideration.

First, *innovation is a multi-level process. Innovation represents both an individual and collective achievement.* Van de Ven (1986: 591) explains that, “while the invention or conception of innovative ideas may be an individual activity, innovation is a collective achievement of pushing and riding those ideas into good currency.” Likewise, Becker and Whisler (1967: 463) state that, “innovation . . . is fundamentally a co-operative group action.” Secondly, *the different stages of the innovation process, and the levels at which they take place,*

are linked by various cognitive and social processes (Becker & Whisler, 1967; Robertson et al., 2007; Shepard, 1967; Van de Ven, 1986). Within this context, this study concurs with Robertson et al. (2007: 5) in suggesting that innovation “is best understood not as a material entity but as a particular combination of flows of knowledge and information.” This suggestion forms the basis of a new understanding and approach to the innovation process.

A New Approach: The Knowledge Based View of Innovation

Previous studies, which tend to promote a structure-based view of the innovation process, provide little practical guidance, for public managers, on the management of knowledge and information. This reveals the importance of a revamped understanding of the innovation process. It is important for one to understand that knowledge and information create the foundation of the innovation process. Moreover, knowledge and information are shaped by the ongoing experiences, interactions, and relationships of those involved in the process. A knowledge-based view of the innovation process forces public managers to visualize and understand the myriad of relationships that can enhance or restrict the flows of knowledge and information.

Two important assumptions about knowledge and information lay the foundation for this approach. First, an individual’s knowledge and information cannot be separated from the specific social relations that are produced and reproduced through practice (Osterlund & Carlile, 2005). Second, as Groff and Jones (2003: 20) suggest, “unlike conventional assets, knowledge grows when it is shared.” This raises several important questions for public managers to consider. How does information flow within the organization? To whom do people turn for advice? Are individuals and groups within the organization able to share what they know effectively? Does the organization have access to the necessary resources (i.e. knowledge, information, money, etc.)? Finally, how are these resources mobilized to effect change and innovate?

The successful completion of the innovation process hinges on the management of knowledge and information through shaping the experiences and interactions of the individuals, groups, and organizations that contain it. Public managers are responsible for creating an environment where different combinations of knowledge and information can come together, win acceptance, and mobilize the necessary resources to implement new ideas. A growing body of research now supports the notion that the network form of governance provides an optimal environment for this to take place (Goes & Park, 1997; Goldsmith & Eggers, 2004; Keast, et al., 2004; Osborne & Brown, 2005; Swan & Scarbrough, 2005). For example, Swan and Scarbrough (2005: 914) argue, “because knowledge is becoming more widely distributed ... innovation is actually more likely to occur at the interstices of collaborating groups and organizations.” In terms of the knowledge-based view of innovation, an important question must be considered: What is the relationship between the network form of governance and innovation? Further, what kinds of processes are needed to capitalize on the benefits of the network form of governance for the purposes of public sector innovation?

Networked Innovation: Potential Obstacles

While many studies have highlighted the potential benefits of the network approach for innovation, few studies have considered the potential obstacles that may arise (Swan & Scarbrough, 2005). When multiple organizations share in governance, they challenge existing patterns of organization and management. Recognizing these challenges is an important step to understanding and managing the network-innovation relationship. In regards to the flow of

knowledge and information, what are the potential obstacles? We have identified three potential obstacles that form the basis of our empirical investigation: 1) a diversity of inputs, 2) incongruent goals, and 3) coordination.

Diversity of Inputs: The failure to communicate

Increased access to specialized knowledge, information, and expertise, resulting from the network form of governance, represents both an advantage and an obstacle for innovation. As Thomson and Perry (2006: 26) indicate, the willingness to share information for the good of the partners is a distinguishing characteristic of networks.” Likewise, the idea generation stage is largely dependent on an atmosphere that encourages and facilitates the sharing of ideas. However, one of the most significant challenges collaborating organizations face is associated with cultural and professional differences, which can create barriers to effective communication. Different organizations, and the individuals within them, may not share a common language and may make sense of, or define, problems differently. To build effective communication channels, public managers must effectively navigate cultural and professional differences to ensure that all participants are given a voice.

Incongruent Goals: Balancing multiple interests

Goldsmith and Eggers (2004: 41) highlight the fact that “networks often bring together actors whose goals simultaneously overlap and differ.” This is a major problem when network participants attempt to maximize their own interest. This is highlighted in the significant differences in interests among public, private, and non-profit organizations. The central challenge in the development of meaningful innovation is determining how to achieve agreement without destroying the relationships and trust that are so vitally important to the network form of governance. With this in mind, reaching acceptance is unlikely when network participants fail to reconcile individual and collective interests to achieve goal congruence (Goldsmith & Eggers, 2004; McGuire, 2002; Thomson & Perry, 2006). Accordingly, public managers are charged with the difficult task of balancing multiple and, sometimes, competing interests.

Coordination: No one’s in charge

The “no one in charge” problem means that in networks the nature of authority differs from traditional organizations, which are typically based on superior-subordinate relationships (Keast et al., 2004; O’Toole, 1997a; O’Toole & Meier, 2004). In networks, command-and-control procedures typically are not an option. Networks require the coordination of efforts between different levels of government, non-profits, and the private sector. When complexity is high and responsibility is unclear, as often is the case within networks, problems with coordination can undermine the innovation process (Goldsmith & Eggers, 2004).

In the next section, this study will offer an empirical investigation of the TEXOMA Regional Consortium (TRC) as an exploratory case study of the network-innovation relationship. Building on the knowledge-based view of innovation, the central purpose of this investigation is to report on how TRC addresses the potential obstacles to innovation posed by the network form of governance. In doing so, this section contributes to an improved understanding of the management of the network-innovation relationship.

Case Study: The Texoma Regional Consortium

Methodology

This article presents the results of an exploratory case study of the Texoma Regional Consortium, the Southern Growth Policies Board's 2007 award-winning workforce development program. The choice of this Consortium developed as a means to study innovation that arose from the network form of governance. The Southern Growth Policy Board is a private non-profit organization that provides a forum for partnerships seeking to strengthen economic development within a thirteen state region in the southern United States. The Consortium, formed in 2006, was chosen due to its innovative strategies, unique network structure, diversity of stakeholders, and the ability to work together despite the active rivalry between Northern Texas and Southern Oklahoma. Texoma consisted of entities representing higher education, K-12 education, business, government, and a variety of non-profit organizations.

Data was gathered during December 2007 and January 2008 from in-depth elite interviews, written documents, media reports, and a preliminary survey, focusing on the process of innovation as the unit of analysis. The managers of each workforce development board had been involved in the establishment of the network; they were ideally situated to assess the extent of success of inter-organizational efforts. Leaders and officials of fifteen TRC member organizations participated in a written pilot survey. Survey data provided baseline evidence about member affiliation, organization function, and opinions on the Consortium's success as a network.

Semi-structured interview questions were formulated to elicit information about the establishment of the network and its duration, the degree of network formality, network structure, institutional diversity, distinct participant roles, leadership structure and the perception of a lead organization, level of network stability, and process mechanisms.

Survey questions were based upon the overall objectives of the study, as well as prior literature (Donahoe, 2004). The resulting survey analysis identified common themes and patterns. Their work showed a high degree of inter-coder reliability.

Written notes were taken of all interviews with the verbal and written consent of the participating individuals. Interview notes were transcribed onto pre-developed data recording templates. Written documents that included meeting minutes, strategic plan documents, Consortium reports, and media articles were analyzed as a means of verifying the information provided by participants.

Background Information

The Texoma region, which encompasses thirteen counties between Dallas and Oklahoma City, is named for Lake Texoma, the large Red River reservoir located on the Texas-Oklahoma border. The region occupies an area about the size of Connecticut and Rhode Island combined (Poole, 2007). Like many other rural communities, the Texoma region, which is largely dependent upon petroleum, agriculture and ranching, mining and manufacturing industries, has faced significant challenges. An aging workforce, increased numbers of low-skilled workers, a perceived lack of community support, and the relocation of highly skilled young workers to

Dallas and Oklahoma City compound the economic development problems (Background Briefing Paper, 2006).

Globalization, economic recession, and technological innovations have caused the counties in the Texoma region to seek common workforce solutions. The Texas and Oklahoma workforce boards, thirteen municipalities, along with businesses, educational institutions, the Choctaw and Chickasaw nations, elected officials, and other stakeholders decided to form a two-state coalition in order to seek solutions to the regions' mounting workforce problem. Among the key goals, pursued by the TRC, are to create employment opportunities and to serve business needs by increasing the skills and availability of Texoma residents.

For its work, the Consortium has been recognized with several awards. This includes the *Best Practice* Honorable Mention of the National Association of Workforce Boards, the *Best Practice Award of Texas* Economic Development Council, and Innovator Award in Workforce Development presented by Southern Growth Policies Board. Accordingly, TRC has generated, accepted, and implemented a number of highly innovative approaches to workforce development and serves as model for networked-innovation.

Analysis and Finding: Fostering Innovation

Recognizing that innovation was not an inherent feature or function of networks, the TRC intentionally designed, developed, and institutionalized several processes to facilitate the completion of the innovation process. Management of these processes is central to deeming the network innovative. They suggest a long-term commitment to innovation. We call these processes *network-innovation mechanisms*. From the TRC case and supported by the knowledge-based view of innovation, we identify and illustrate three network-innovation mechanisms: integration, dialogue, and coordination.

Mechanism I: Integration

After reviewing the TRC, it became increasingly apparent that networking for innovation, especially at the idea generation stage, is highly dependent on the integration of knowledge and information from a diversity of inputs. Mechanisms of *integration* help to ensure that participants are given equal opportunity and consideration in sharing their ideas, suggestions, and concerns. These mechanisms help facilitate the development of inter-dependent relationships based on trust and professionalism, which are vital to open communication. In summation, mechanisms of integration help create value in participation and, thereby, enhance the flow of information and knowledge.

In their search for innovative ideas, the Texas Workforce Commission and the Oklahoma Department of Commerce developed a strategic partnership with several different entities representing the public, non-profit, and private sectors. Many of these partnerships are based on, or are extensions of, past relationships. This helped create the necessary pre-conditions for sharing knowledge and information: trust and interdependence (Bridging the Red River, 2007). In practice, the generation of ideas for year-to-year action planning, is supported by the belief that a diversity of voices and ideas boosts brainstorming capability. The survey showed that members strongly felt that collaboration, member diversity, and the overall culture of the TRC

supported the idea generation phase. Three mechanisms of *integration* were identified within TRC.

- *Empowering based on Increased Professionalism* – Surveyed members point to the fact that the Consortium limits any pre-occupation with status by empowering each of the participants as professionals. TRC does this by building trust with each of the participants and their organizations, through the creation of sub-committees, so that they can take the lead in their area of expertise.
- *Using the Most of Past Relationships* – The majority of the TRC’s boundary spanning efforts are based on past relationships. This limits uncertainty and helps create favorable pre-conditions for sharing information and knowledge.
- *Symbolizing* – The management within the TRC has worked to create a culture in which the participants realize that they are a part of something important to the region. This is based on a shared belief that alone each organization is but only one piece of the puzzle. The TEXOMA symbol serves both as common identity and as a reminder of the value of participation in this effort.

Mechanism II: Dialogue

Innovative ideas needed to solve “wicked problems” thrive in cohesive, well-managed networks where members share an overall goal (Weber & Khademian, 2008). Surveyed members point to the fact that an overall sense of goal congruence is necessary for the organization to complete its mission. The overall goal for TRC, as written and stated by Consortium members, was to create common vision for a stronger economic future in the Texoma region. Achieving goal congruence can become a major obstacle in the acceptance stage of the innovation process within networks. Recognizing this obstacle, this study found that the TRC reached acceptance through the development of a joint understanding of the problems members faced. By generating new ways of seeing and understanding each problem, mechanisms of *dialogue* played a major role in this development.

Various levels of social interaction, cognition, and meta-cognition are necessary for the acceptance of ideas (Becker & Whisler, 1967; Shepard, 1967). In 2006, the Consortium held the first economic summit in which the stakeholders identified assets, obstacles, employment enhancement activities, development clusters, and a framework for future collaboration (Economic Summit, July 2006). At the summit, Consortium members used various strategies, employing large and small group cooperative discussion techniques, consensus-building activities and feedback strategies (Manning & Rhoden, 2008). Specifically, discussion groups at the summit were asked to articulate strategies, develop methods that would sustain the work after the development of the plan, vet the group results, and provide feedback to the larger group (Economic Summit, July 2006). Varied organizational backgrounds enriched the conversation. Educators conversed with businesspersons, and workforce development personnel strategized with tribal chiefs. In the months that followed, groups assessed the information by continued communication between the sub-regional task forces and the larger Consortium.

Data from the summit were used to develop a report, “Bridging the Red River” (2007), which initiated the prioritization of strategies and the development of a vision. This eventually led to the formation of a unified workforce development plan for the Texoma region. Because of

the size and diversity of the Texoma region, task forces and sub-regional committees led by chairpersons or champions, were created to write and communicate the goals, objectives, and action steps for the Consortium plan. By the spring of 2007, as the result of the second economic summit, TRC had put into place plans for implementation, monitoring, and program continuation (Poole, 2007; Economic Strategy Report, Spring 2007).

The large group continues to facilitate the interaction of different components of the workforce development plan. Group facilitation and consensus building strategies help maintain a cohesive sense of mission between the large and small working groups. The pilot survey showed that ideas are heard and represented within the group, the diversity of voices helps the brainstorming process, and that leadership encourages group consensus. Several mechanisms of dialogue can be drawn from this illustration.

- *Regular meeting institutionalization in the forms of the Summit, Sub-Regional Committees, Task Forces* – The TRC management has instituted meeting times that occur on a regular basis. These meetings stimulate dialogue and the exchange of ideas. In addition, the sharing and time together facilitates the growth of relationships and trust.
- *Appropriate Discussion Groups/Consensus-building techniques/Brainstorming development* – The TRC management implements several discussion techniques to create a team atmosphere and get each participant involved in the process. This helps facilitate a joint understanding of problems and the acceptance of new ideas and approaches.

Mechanism III: Coordination

As a network, the TRC created a vision and produced a plan to support that vision. What the Consortium needed was an effective means of materializing or implementing this vision. While the literature suggests that the network structure may play a positive role in the innovation process (Zaltman et al., 1973; Pierce and Delbecq, 1977), problems may arise because, unlike traditional organizational structures, no one is in charge (Keast et al., 2004). Thus, network structures will require several mechanisms of *coordination* to complete the innovation process. Consortium members used these mechanisms to perform the difficult task of mobilizing a number of different individuals and their organizations to get things done, while ensuring positive results. They must use them in a way that does not negatively influence the other stages of the innovation process.

TRC members have structured their network such that it has elements of an informal horizontal collaborative, while maintaining vestiges of a bureaucratic structure. Conversely, the configuration suggests a tight somewhat hierarchical structure, which can be observed in the operation of the core steering committee monitoring the work of smaller task forces and sub-regional committees (Economic Summit, July 2006). Likewise, the coordinators of the two state workforce boards play a leadership role in facilitating the development of the goals and objectives and communicating them to the different committees and working groups (Manning & Rhoden, 2008). It seems that the flexibility of the network structure makes this possible.

Decision-making in these types of arrangements, however, is not a given. A distinct decision-making framework has been set into place by TRC members that helped lead members through the creation of a workforce development plan. The TRC core steering committee serves

as the proverbial network manager and provides some structure in organizing a variety of on-going regional activities. In this role, the TRC . . . “continues to manage task force action steps, implement activities aimed at fostering regional collaboration, and provide on-going support to the Task Forces and their sub-regional committees in the form of fund-raising and leadership” (Bridging the Red River, 2007: 76). This framework equips the organization with a renewed knowledge base and the formation of a collective wisdom. This collective wisdom allows TRC the ability to work on difficult problems without losing the integrity of its network structure and culture. Two mechanisms of coordination were identified in this study.

- *Continued Tracking System through Annual Report/Website* – The TRC has developed several ways to track progress and share results with participants.
- *Instituting Legitimate and Core Steering Committee* – A core steering committee performs as the network manager and was put together to keep things moving by keeping the Consortium on target. This committee was kept purposefully small but remains legitimate because each is actively involved in the different aspects of the TRC. The committee works to create a culture of innovation.

Discussion

This study discusses several points in regards to the relationship between the network form of governance and innovation. First, it emphasizes the role of management. The network structure alone does not ensure innovation. Although many studies suggest the network structure has a positive impact on innovation, many public organizations that adopt the network form of governance often fail to innovate. The structure or form of networks helps achieve innovation partially, but not entirely. It is important for one to understand the role of management in completing the innovation process. It was especially important then for those in the core steering committee and the workforce boards to facilitate the social interactions and help develop relationships between those involved in the process. These relationships enhance the sharing and emergence of knowledge and information, a vital component of innovation. The analysis of the TRC shows the importance of the three network-innovation mechanisms: integration, dialogue, and coordination.

Second, by analyzing the innovation process, this study explores the potential obstacles to innovation posed by the network form of governance. Many studies, to date, have failed to do so and provide for a somewhat limited understanding of the network-innovation relationship. This is largely due to innovation being viewed as an outcome rather than as a process with overlapping stages. To address this limitation, this study offers an in-depth review of the innovation process and its characteristics. In doing so, it focuses on the problems posed by the network form of governance for each stage of the innovation process and tries to identify several processes that address these problems. For example, as shown in the conceptual framework, the innovation process is comprised of three stages: idea generation, acceptance, and implementation. The structure of the network form of governance benefits the idea generation stage. However, the structure poses several problems for the acceptance and implementation stages. In other words, public managers should seek the design, development, and institutionalization of network-innovation mechanisms. These mechanisms can be applied to each innovation stage to help the network overcome obstacles as they arise.

Conclusion

This study examined how the flow of knowledge and information and the social interactions of the network form of governance intermingle to birth innovation. In the TRC case, innovation born of the individual and, to the larger extent, of collaborative achievement serves a worthwhile public purpose: to increase job opportunities and to spur economic development in the region. The study also showed that, in best-case scenarios, the network form of governance properly managed should increase the capacity for innovation.

At the same time, while the structural characteristics of the network approach are important, various processes or mechanisms help networks overcome any obstacles that may arise and support the completion of the innovation process. Thus, the central finding of this study is as follows:

Increasing the capacity for public sector innovation, through the network form of governance, requires the intentional design, development, and institutionalization of several mechanisms to facilitate the completion of the innovation process.

The network-innovation mechanisms identified in our single-case exploratory study do not comprise an all-inclusive list of solutions for public managers. Yet, it does provide them with some practical guidance. The network-innovation mechanisms, offered in this study, lay the groundwork for the development of an improved understanding of the network-innovation relationship and the management of the network-innovation relationship.

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