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### LOST IN TRANSLATION: IMPLICATIONS OF A FAILED ORGANIZING VISION FOR THE GOVERNANCE OF A MULTI-ORGANIZATION SHARED IT INFRASTRUCTURE

Completed Research Paper

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#### **Abstract**

We studied the early-stage development of a newly formed shared services unit providing IT infrastructure services to multiple enterprises and examined the evolution of the organizing vision established for the unit. Through a three-cycle action research design, we found that the initiallyarticulated organizing vision failed to take hold with constituents and no effort was undertaken to evolve this organizing vision. In the absence of a strong and compelling organizing vision, client entities interacted with the shared services unit on an individual basis, compromising the initial purpose of the shared services unit as an innovation that had the potential to provide value as a 'social good' across a community. In examination of contributing factors of a failed organizing vision, we found that discourse across multiple levels of the community and effective chargeback processes were critical elements for evolving a meaningful organizing vision. Research and practical implications of these findings are discussed.

Keywords: organizing vision, shared services unit, multi-level community, IT governance, action research

#### Introduction

Cooperating organizations are increasingly being seen as extended enterprises that share assets, processes and capabilities to create and sustain value-adding competencies that the individual organization could not achieve acting alone (Krishnan et al. 2007; Post et al. 2002). Shared technology platforms serve as key enablers of such extended enterprises, interconnecting these organizations' data and intellectual asset flows (Park and Favrel 1999). An example of such a technology platform is a shared IT infrastructure providing pre-defined data and networking services (Janssen and Joha 2006). Shared services units have proved to be effective means for organizations to achieve significant economies of scale and efficiency (Bergerson 2003).

A shared services unit faces the challenges of balancing the interests of its constituencies (Freeman 1984), such as balancing constituents' expectation of both the nature of provided services and associated service levels. The challenges are likely to intensify during a shared services unit's formative stage when its identity (Dutton and Dukerich 1991) and working relationships with constituents are established (Anderson and Weitz 1989). At this formative stage, the tendency is for constituents to retain their individual identities and hence make little progress in building a common institutional context. How well these early-stage challenges are handled can significantly affect the ultimate success of the shared services unit (Büchel et al. 1998).

An organization's identity reflects what members – or, *constituents* in our context of a shared services unit serving multiple enterprises – believed to be the organization's enduring character and hence provides guidelines for individual and collective behaviors (Whetten and Godfrey 1998). Important for our purposes, organizational identity can be conceptualized as a multi-level (embraced by social actors at the strategic, tactical, and operational levels of the organization), temporal (continuous yet mutable over time) notion that is socially constructed through constituents' iterative interactions (Gioia et al. 2000). In essence, organizational identity is maintained within constituents' cognitive schema (Elsbach and Kramer 1996). The conceptual lens that envisages organizations as systems of meanings (Weick 1995) and portrays organizational arrangements as systems of knowing (Armstrong and Sambamurthy 1999; Nahapiet and Ghoshal 1998) is useful for understanding how organizational identities form. Looking through this lens, constituents develop collective organizational identifies by sharing perspectives, pooling knowledge and developing shared understandings, largely through constituent (vertical and horizontal) communication and influence processes (Dutton et al. 1994, Gioia and Thomas 1996).

A mechanism thought particularly useful for shaping an organization's identity involves the organization's leadership articulating a strategic vision (Collins and Porras 1991; Oswald et al. 1994), or a view of the organization's future that is both meaningful and empowering. In essence, a strategic vision serves as a boundary object (Carlile 2002; Star and Griesemer 1989) that simultaneously shapes and links members' personal interpretations of organizational purpose and character. Swanson and Ramiller (1997) have introduced a related notion – *organizing vision* – at a community rather than organizational level (that is, where interacting participants represent multiple organizations rather than a single organization). As developed by Swanson and Ramiller (1997), an organizing vision is directed at legitimizing the usefulness of a technological innovation's nature and capabilities across community participants so as to induce and coordinate individual and collective actions facilitating the innovation's adoption and use. The organizing vision thus serves as a technological frame influential in establishing the collective expectations of a community (Orlikowski and Gash 1994; Boland 2001; Gal and Berente 2008).

Our research objective in studying a newly formed shared services unit providing data and networking services to multiple enterprises was to examine the evolution of the organizing vision established for the unit and the influence of this evolving organizing vision on the nature of the services being delivered and constituents' satisfaction with the unit's performance. In doing so, our intent was to develop a better understanding of the iterative manner by which an organizing vision influenced the constituents' perceptions and adoptions of the shared services unit and how these constituents' behaviors shaped the natures of both the organizing vision and the shared services unit.

In executing our research, two issues became evident: first, the initially-articulated organizing vision failed to take hold within the constituents and no revision effort was undertaken; second, constituents over time developed increasingly homogenous views of the shared services unit and became increasingly satisfied with received services. This somewhat paradoxical outcome led us to refocus our research objectives on the following three questions: Why did the initially-articulated organizing vision fail to gain traction? What behaviors surfaced to evolve the shared services unit's identity? What consequential outcomes might be linked to the failure to evolve an effective organizing vision?

Findings from this study suggest that in the absence of a compelling organizing vision, the initial purpose of a shared services unit may be compromised as community members bypass a sense of 'community' and instead act on their individual agendas. Such findings highlight the importance of an organizing vision in enforcing community practices and motivating community interpretations/adoptions of an innovation. Findings also suggest that the content of the organizing vision, the nature of the discourse across multiple levels of the community, and the existence of effective chargeback processes (to induce the 'creative abrasion' motivating community members to negotiate their practices) are critical for the evolution of a meaningful organizing vision.

The rest of the paper is organized as follows. We start with a review of the study's conceptual foundation, followed with an overview of our research design and methodology. Next, we report our data and findings that emerged from analyses of these data. Finally, we discuss the implications of these findings for both research and practice.

#### **Conceptual Foundation**

Visions, be they strategic or organizing, are important in furthering collective action as these conceptual boundary objects enable leadership teams to seed and shape stakeholders' cognitive schema and subsequent behaviors (Marcus and Zajonc 1985; Spekman et al. 1996; Stafford 1994). Effective visions communicate two key notions about a vision entity (Collins and Porras 1991): the core values and beliefs that underlay its design, and the value-generating potential it holds for stakeholders. Effective organizing visions, then, should communicate to community participants both an innovation's unique and enduring properties and the value-adding potential of these properties for participants.

While organizing visions are produced and sustained through institutional processes (Ramiller and Swanson 2003), mindful community participants make sense of an organizing vision by integrating localized specifics with both the leaderships' and the broader community's cognitions (Swanson and Ramiller 2004). Either underdevelopment of an organizing vision or its mindless interpretation by participants can inhibit the vision's acceptance by and influence on a community's collective cognitions (Currie 2004).

#### Participant Interpretation of an Organizing Vision

As developed by Swanson and Ramiller (1997), intricate relationships exist among an innovation, its organizing vision and an adopter community. While community participants make use of the organizing vision to understand the functionality and usefulness of the innovation, these same participants co-produce and sustain the organizing vision through community discourse – a discourse characterized by agreement and disagreement as community participants negotiate interpretations of the innovation. In such negotiations, less powerful, less involved voices are likely to give way to more powerful, more involved voices (Meindl et al. 1994; Powell and Brantely 1992). But, as an organizing vision gains in favor and stability, participants' interpretations of the innovation converge as a result of an institutional coherence process (Milliken 1990).

Ramiller and Swanson (2003) identify four criteria for appraising the meaningfulness of an organizing vision: *Interpretability* concerns the intelligibility and informativeness of the organizing vision, addressing issues such as clarity, consistency, richness and balance. *Plausibility* addresses the extent to which an organizing vision is absent misunderstandings, exaggerations and misplaced claims. *Importance* reflects the extent to which an organizing vision describes the value and realizability of an innovation's functionality. Finally, *discontinuity* represents the extent of the gap between participants' current view of their contextual reality and that reflected in the organizing vision.

#### Multi-Level Operationalization of an Organizing Vision

A community's participants hold roles representing distinct hierarchical strata, with these strata determined by the nature of the community and participants' authority and/or expertise (Form 1945). Stratification theories suggest such strata often take the form of an upper strata (strategic role), middle strata (tactical role), and lower strata (operational role) (Olson 1965); and participants' commitment to and influence in shaping an organizing vision is expected to vary according to these strata (Stone 1980). Participants holding strategic roles are expected to exhibit considerable influence on an organizing vision's early meaning and on establishing a governance system to guide the vision's evolution; participants holding tactical roles are expected to have considerable influence on allocating the resources to enact the vision; and, participants holding operational roles are expected to have considerable influence on the enactment of the vision.

For an organizing vision to effectively mobilize a community to adopt and use an innovation, it must resonate with participants across these strata. How is this done given strata variation in participant experiences, activities and vested interests? Research on strategic visioning (e.g., Mintzberg 1994; Nonaka and Takeuchi 1995) suggests that instrumentally ambiguous vision statements can be effective in allowing interpretive flexibility across strata. It is unclear if such a recommendation holds with extended enterprises lacking unifying institutional structures.

#### **Research Methodology**

Our research strategy may be best described as "soft positivism" (Eisenhardt 1989; Kirsch 2004; Madill et al. 2000), a hybrid approach that examines pre-identified constructs and surfaces new constructs in the manner of interpretivists. More specifically, we apply action research (Baskerville and Wood-Harper 1996), i.e., a research approach that combines "... generation of theory with changing the social system through the researcher acting on or in the social system" (Susman and Evered 1978: p.586). Quantitative and qualitative data are collected and analyzed in each of three-cycles of data collection with recommendations provided by the research team to the research site leadership team at the conclusion of each cycle.

#### Research Site

The research site was a 'greenfield' shared services unit providing data and networking services to twelve work units housed in a newly-constructed facility on the research campus of a university. This facility was jointly funded by a university (represented by seven of the twelve work units) and a US federal government agency (the other five units). By providing an IT infrastructure enabling a portfolio of services (e.g., collaboration services such as messaging, conferencing and data/file storage/sharing along with generic services such as server configuration, security and desktop support), it was expected that opportunities for and the ease of collaborating would both increase.

A Shared Services Center (SSC) was established to host these data and network services and to operate/manage the enabling IT infrastructure. The SSC was co-managed by one university employee (responsible for managing SSC operations) and one federal employee (responsible for ensuring that the SSC was not in violation of federal security policies), and was staffed by three individuals transferred from the university's IT department: an administrative head (responsible for aligning the facility's IT architecture with that of the university) and two network operations employees.

Prior to moving to the new facility, the twelve work units had obtained technology services from internal resources and from resources provided by a parent organization; many of these legacy technology services would continue after moving to the new facility. This necessity to contend with multiple data and networking infrastructures was particularly acute for the two federal agency work units whose primary mission was operational rather than research. This reality of multiple data and networking infrastructures created boundary conditions – that varied with each of the work units – with some technology assets/services to be owned and operated by a work unit and others to be provided through the SSC. This significantly compounded the complexities involved in deciding on the shared data and networking services to be provided by the SSC.

The objective of the SSC was to enable collaboration in a multi-organizational context. However, multi-organizational collaboration can be risky and challenging for various reasons (Ackermann et al. 2005). First, constituents typically lack history of social and working relationships. They tend to agree on the general purpose of collaboration but their goals and strategies may be conflicting and incongruent (*cf.* Bragge et al. 2007). The participants in the multi-organizational context are usually involved with complex politics and power, and they play multiple roles in ensuring the agreement of collaboration to be implemented. Finally, when technological demands and support arise from multiple organizations, it can be difficult to identify who the real client is.

In order to facilitate a smooth transition to multi-organizational collaboration, two governance bodies were formed: a Directors Council (DC) and a Network IT Council (NITC). The DC provides strategic direction and holds overall accountability for the SSC. Membership of the DC includes the director of each work unit (or their designees). The DC was led by co-chairs serving a two-year term: one representing the university work units and the other the federal agency work units. The DC also included two ex-officio members, the university and federal agency CIOs, serving in an 'observing and advisory' capacity. The NITC's responsibilities included establishing and evolving the roles and responsibilities of the SSC, developing a long-term funding scheme for the SSC, and providing tactical direction with regard to the delivery of data and networking services. The NITC membership consisted of one

representative from each of the twelve work units, with two of these representatives (one from a university work unit and the other from a federal agency work unit) serving as co-chairs. The NITC membership, for the most part, was populated by IT support leads from the work units. One of the seven university representatives, in addition to representing a work unit, also served as the director of Research Computing Services that provided IT support and services to all university units on the Research Campus. He had worked closely with other representatives from university units to coordinate the IT needs on the university side until he left the university and moved to another job in October 2007. The NITC also included all SSC staff as ex-officio members.

The actors within our research context thus represent three organizational levels: DC members at the strategic level, NITC members at the tactical level, and SSC members and NITC members in their respective work units at the operational level.

A core element associated with the development of the SSC was a "memorandum of agreement" (MOA) included a section providing an initial organizing vision defining and describing the intended roles and functions of the SSC to all community members as well as to external constituencies. The MOA was negotiated by the DC membership during 2005 and agreed to (and signed) by all parties in early 2006. The new facility was completed in May 2006 with occupancy beginning August 2006. For about a year prior to the move-in date, the NITC membership met every other week as an informal committee to establish an initial set of SSC roles, responsibilities and policies and to establish NITC governance procedures. Beginning August 2006 and for the remainder of the calendar year, the NITC met weekly. Beginning January 2007, the NITC met once a month.

#### Data Collection

The study's two authors negotiated their involvement with the DC; approval for the project occurred in early summer 2006. The first author attended all NITC meetings from August 2005 through July 2007 as a noninterventionist observer. In addition, in order to better understand the activities of the SSC and the two governance bodies, she met multiple times with one member of the DC and met with each NITC and SSC member.

In 2007, three cycles of data collection were conducted through surveys and interviews (see Table 1). Each of these cycles involved: collection and analysis of survey data, development of interview questions based on the data analysis, collection and analysis of interview data, production of an interim report, discussion of this interim report with a DC co-chair, and presentation of the report to the NITC membership.

Table 1. Overview of Surveys and Interviews							
Data Collection	Date (M/Y)	Number of respondents from each work entity					
		SSC	University	Federal	Total		
First-cycle survey	02/2007	3	4	2	9		
First-cycle interview	03/2007	2	1	1	4		
Second-cycle survey	04/2007	3	7	3	13		
Second-cycle interview	05/2007	1	2	1	4		
Third-cycle survey	06/2007	3	4	4	11		
Third-cycle interview	07/2007	1	1	1	3		

The target population at the research site included 19 people, of which 16 agreed to participate in our surveys and interviews. Survey questionnaires were digitally produced and emailed to these 16 SSC and the NITC members, followed by additional email messages and phone calls to increase the response rate. Survey items captured data on respondents' assessments of the organizing vision, their satisfaction with the SSC, and whether specific data/networking services should be provided by the SSC or by each work unit (see Table 2). The items for assessing the organizing vision are based on a framework developed by Ramiller and Swanson (2003). The remaining items were unique to this data collection effort. Slightly different versions of the survey were used with the NITC members, the SSC co-managers and the remaining SSC members to ensure item meaningfulness for each respondent.

Table 2. Survey Instrument						
Constructs	References of Constructs	Sample Items				
Frequency of Viewing	Developed for this study	Please indicate the number of times you have looked at				
Organizing Vision		the MOA in the past three weeks. (1-none; 5-several				
		times a week)				
Organizing Vision	Ramiller and Swanson (2003)	To what extent are the roles and responsibilities of the				
Interpretability		SSC made understandable through the MOA? (1-not at				
		all; 5-fully understandable)				
Organizing Vision	Ramiller and Swanson (2003)	To what extent is the MOA realistic? (1-not at all; 5-				
Plausibility		fully realistic)				
Organizing Vision	Ramiller and Swanson (2003)	To what extent are the services provided by the SSC as				
Importance		specified in the MOA important to your organization?				
		(1-not at all; 5-extremely important)				
Organizing Vision	Ramiller and Swanson (2003)	To what extent would your organization have to change				
Discontinuity		in order to fully leverage the SSC services as specified				
		by the SSC? (1-no changes are required; 5-substantial				
		changes are required)				
Satisfaction with the	Developed for this study	- To what extent do SSC personnel understand your				
SSC		organization's specific needs? (1-not at all; 5-				
		completely)				
		- To what extent have the services provided by the SSC				
		met your expectations? (1-not at all; 5-completely)				
Expectation of service	Developed for this study	Please select the most appropriate answer for each				
responsibilities		service area to indicate the distribution of				
		responsibilities that should be allocated in providing				
		network services to client entities. (1-solely the SSC's				
		responsibility; 5-soley NITC's entities' responsibility)				

NITC and SCC members were randomly selected for the semi-structured interviews with open-ended questions (varying with each cycle) that sought to provide a richer context for interpreting the survey results and to gain additional insight about specific issues surfaced through the survey data. In selecting interviewees, at least one interview was held with a representative of the SSC, the university work units, and the federal agency work units. Interviews were recorded and transcribed, with interviews on average being 26 minutes in length (the shortest being 9 minutes and the longest 58 minutes).

At the end of each cycle of data collection, a report summarizing findings and recommendations for changes was prepared by the authors and provided to the DC. After feedback was received from the DC, the report was finalized, shared with the co-chairs of the NITC, and then presented to the NITC membership. Adopting Checkland's (1981) 'soft systems' action research methodology that refrains from direct researcher system intervention, these reports seeded the DC and NITC management teams with observations, ideas and suggestions for action. A minimum one month interval separated a report presentation to the NITC membership and the beginning of a subsequent cycle of data collection.

A vital element of our action research design, the contents of this report thus serves as a final data source brought into our analysis strategy. Table 3 summarizes the key contents of these three reports along with the site's response to each. As can be inferred from Table 3, little progress was observed in revising the SSC organizing vision, i.e., the memorandum of agreement, in clarifying the SSC's roles and responsibilities, or in developing additional cross-level governance processes.

Table 3. Summary of research team feedback						
	Reported Findings	Suggested Changes				
1 <sup>st</sup> Cycle	<ul> <li>Poor NITC/SSC communication</li> <li>Lack of formal policies/procedures regarding NITC/SSC coordination</li> <li>Lack of a formal system for evaluating SSC performance</li> <li>Inadequacies in the SSC organizing vision</li> <li>SSC desire for a single service level agreemen</li> </ul>	<ul> <li>Improve NITC/SSC communication</li> <li>Implement policies/procedures regarding NITC/SSC coordination</li> <li>Improve meaningfulness of the SSC organizing vision</li> </ul>				
Site Response	DC emphasized the need to improve NITC/SSC communications     NITC/SSC co-chairs met and discussed tactics for improving communication and revising the SSC organizing vision  One of the NITC co-chairs asked the DC to become involved in revisiting the SSC organizing.					
2 <sup>nd</sup> Cycle	<ul> <li>Some improvement in NITC/SSC communication</li> <li>Inadequacies in the SSC organizing vision</li> <li>Lack of consensual agreement regarding SSC roles and responsibilities</li> <li>Inadequacies in SSC service reliability/quality</li> <li>Inadequacies in NITC/SSC trust/partnership</li> </ul>	<ul> <li>Improve NTTC/SSC communication/trust</li> <li>Improve meaningfulness of the SSC organizing vision</li> <li>Implement policies/procedures regarding SSC roles/responsibilities</li> </ul>				
Site Response	The DC met with NITC co-chairs and suggested one of the NITC co-chairs take a lead in revising both the SSC organizing vision and the policies/procedures regarding SSC roles/responsibilities					
3 <sup>rd</sup> Cycle	<ul> <li>vision</li> <li>Inadequate policies/procedures related to NITC services demands</li> <li>D</li> <li>D</li> <li>Sy</li> </ul>	<ul> <li>Clarify NITC Needs and SSC's roles/responsibilities</li> <li>Develop SSC performance objectives/measures.</li> <li>Develop a web-based, real-time communication system for handling and managing NITC service requests.</li> </ul>				
Site Response	<ul> <li>SSC develops a blog for communication purposes.</li> <li>NITC co-chairs plan to revise the SSC organizing vision</li> </ul>					

#### Data Analysis

We produced descriptive statistical analyses of the survey data to observe changes in data pattern over the three cycles of data collection. The first author and a research assistant (not involved in this study otherwise) read through the interview transcripts several times, individually noted key issues, and then jointly analyzed these issues to understand the evolution of these issues as they surfaced and took on observable patterns. Finally, the first author and this research assistant analyzed the survey data and the interview data together, accounting for contextual nuances in moving through each action research cycle, to identify the evolution process of the SSC organizing vision as well as reactions to the SSC, the organizing vision, SSC governance processes and associated consequences.

#### **Initial Findings**

On average, the SSC members looked at the organizing vision more frequently (about once a week) than did the NITC members (less than once a week). For the two vision assessment dimensions (interpretability and plausibility) evaluated by all respondents, the scores reported by the NITC members were lower (i.e., the organizing vision less interpretable and less plausible) than those reported by the SSC members. The assessments by the NITC members

tended to improve slightly with time and the assessments by the SSC members tended to decline slightly with time. With both the NITC and the SSC members, these scores were at or below a midpoint on the rating scale. Interestingly, the variability in both NITC and SSC assessments tended to increase slightly with time. Overall, evidence suggests that neither the NITC nor the SSC members embraced the organizing vision, with the NITC members exhibiting less favorable and more variable assessments than the SSC members.

With few exceptions<sup>1</sup>, a sizeable gap existed between the NITC and the SSC members as to whether specific data/networking services should be 'owned' by the SSC or by the work units. As might be expected, the SSC members located the ownership for each service closer to the SSC than did the NITC members. However, this gap lessened with each successive cycle of data collection with movement toward a middle ground that still favored most services being carried out by the SSC. The variance in both NITC and SSC member responses regarding service ownership declined over time, supporting this movement toward a more common ground.

NITC member satisfaction with the SSC was assessed by one item capturing the extent to which the SSC understood client needs and one item capturing the extent to which provided SSC services met client expectations. Results indicated a sizeable increase in NITC member satisfaction with the SSC's services over time along with an accompanying reduction in variance.

#### **Elaborated Analyses**

As described earlier, the first author along with a research assistant engaged in an iterative open coding process (Eisenhardt 1989; Kirsch 2004) to identify core concepts and themes relevant to the study's research questions and to connect these emergent themes with theoretical concepts (Miles and Huberman 1984; Pettigrew 1990; Strauss and Corbin 1990; Vlaar et al. 2008). Here, we first provide evidence regarding the failure of the organizing vision and propose two explanations for why this organizing vision was neither accepted nor revised: a lack of meaningful multi-level community discourse, and the lack of a chargeback system for SSC-provided services. Lastly, we discuss the consequences of an ineffective organizing vision to SSC performance.

#### Failure of the Organizing Vision

The DC developed the MOA as a means of establishing within stakeholders a consensual view of the joint effort to move the eleven work units into a common facility. The MOA covers issues related to the entire facility, such as the services to be provided (including the SSC), funding issues, and descriptions of the membership, operation, and functions of the DC, NITC, and SSC. As mentioned earlier, one portion of the MOA defining the roles and responsibility of the SSC served as an initial organizing vision for the SSC. What follows is this initial organizing vision (modified to ensure organizational, unit and individual anonymity):

#### The SSC will:

• Function under the direction of the Directors Council (DC).

- Be co-managed by one university employee (responsible for day-to-day operations and one Federal employee (responsible for the network security).
- Administer all Network connections, DNS, external and joint use systems (i.e.: Access Grid room, wireless access, security webcams, joint use web servers, authentication systems, etc.) and other systems as required or funded. The SSC will also administer necessary Federal agency web mirrors, DNS, and firewalls.
- Operate as a cost center. All costs including labor, maintenance and operations will be split according to Paragraph 9 of the facility Memorandum of Agreement (MOA)<sup>2</sup>, pending approval of the DC.

Swanson and Ramiller (1997: p.459) suggest that an effective organizing vision should state "what it [the innovation] is good for, how it works, under what condition its benefits might be realized, the organizational changes it portends, and how it should be implemented." Clearly, this initial SSC organizing vision lacks critical

<sup>&</sup>lt;sup>1</sup> Among the network services, SSC and client respondents had least disagreement on the location of two fundamental services, core layer and emergency response, which all agreed should reside with the SSC.

<sup>&</sup>lt;sup>2</sup> The MOA outlines the conditions under which the occupants of the new building will share and operate all building facilities, including the computing network. This document is intended to be included in the building lease that will specify how the SSC will be funded. Paragraph 9 of the MOA states: "All costs for the information technology infrastructure and maintenance shall be borne as provided in the building lease."

content, focusing primarily on structural and cost issues and both tersely and ambiguously describing the nature and value of the services to be provided.

The contrast provided earlier between NITC and SSC reactions to the operating vision indicated that the NITC members, in particular, failed to connect with the organizing vision. This interpretation is substantiated by interview comments:

"The memorandum of agreement has been rendered almost pointless because it was too ambitious in the sense it was partly to help create the SSC and it was successful. We got the SSC and it was a very important step. But looking back over it, it was too broadly stated. The operation is all understandable but the memorandum of agreement is not explaining that. There were too many vague things that I think open up too many holes." (Interview with NITC member,  $I^{st}$  cycle)

"The memorandum of agreement does not say much, and it leaves lots of room for imagination. It is not particularly motivating, or empowering. It is pretty vague. The memorandum of agreement should focus on addressing what the SSC is devoted to do, and be a statement of taking responsibilities." (Interview with NITC member, 2<sup>nd</sup> cycle)

Why the initial organizing vision lacked meaningfulness to the NITC and the SSC members is better understood when it is recognized that this initial organization vision was actually targeted not at the NITC or the SSC members but rather at the university and federal agency senior executives who would be approving the funding of this collaborative arrangement:

"I would say to be perfectly candid, in my opinion, the purpose of memorandum of agreement was to enable the creation of the SSC not from a building perspective but from a political perspective above the building. So we would have something that made enough sense to let the people in Washington D.C. and the people in the president office at the university see there is an actual need and possible funding sources that this could actually happen. It was designed to appease the higher levels so that they would OK it." (Interview with NITC member,  $1^{st}$  cycle)

A vivid example of how the 'politics' implied in the initial organizing vision differed from what was experienced as the SSC became operational can be seen in the relative influence of the university and the federal agency in SSC operations. An appendix to the MOA describing SSC operating procedures stated, "The SSC co-managers will be mutually responsible for, and have final determination on, all modifications to the IT network". However, because SSC employees, other than the IT security officer, were former employees of the university's IT department, the university's IT department played a much more significant role in the SSC operations than expected:

"The memorandum of agreement was written a long time ago before anybody really had any idea what was going to be going on in this building. Now we've been here for nearly a year now, it needs to be completely re-written. I did see the memorandum of agreement before. It was sent up to Washington to have our signatures put on there. But that was a year before we moved into the building, and we had no idea how everything was going to work in here. We were more under the impression that they (university IT) were actually going to work with us, not put up walls and say this is the way it's going to be. So once we got in here and realized what their attitude was, things started changing. There are a lot of bigger things." (Interview with NITC member,  $2^{nd}$  cycle)

This and other discrepancies seem to have led to the significant disjunctures that arose early between and among the NITC and the SSC memberships.

One might well expect that such discrepancies between the initial organizing vision and the operational reality of the SSC implementation would have led the NITC members to recognize the need to revise the organizing vision – especially in light of the research team's repeated surfacing of this need. While the following comment indicates that this was in fact recognized, no explicit revision effort was undertaken.

"I think the actions of NITC co-chairs in beginning the dialogue regarding the memorandum of agreement have been productive. However, we need a larger, a more inclusive look at what needs to be done and how things need to be done, rather than a very micro-scale look at it." (Interview with SSC member, 3<sup>rd</sup> cycle)

Our interest now shifts to explaining of why, when the initial organizing vision was clearly not accepted by the community, was no effort was taken to improve it? Our analyses suggest two primary explanations: a disconnection between the strategic and tactical/operational discourses, and the lack of a chargeback system for recovering the costs of SSC services. Each of these is now discussed.

#### Disconnection between Strategic and Tactical/Operational Discourses

The initial organizing vision for the SSC was developed by a limited number of individuals from the DC, representing the strategic strata of this community. As indicated in the comments below, consensual agreement with this initial organizing vision was not sought from the NITC members and the SCC members (representing both the tactical and operational strata). Essentially, the initial organizing vision was imposed on the NITC and the SSC, with minimal discourse occurred between the DC and the NITC/SSC over this period of time:

"The MOA is not an agreement between the NITC and the SSC. The MOA is not between the university NITC members and the federal NITC members. The MOA is an agreement between the CIO of the federal agency and the CIO of the university ..." (Interview with SSC member, 3<sup>rd</sup> cycle)

Further, minimal discourse of any kind occurred between the DC and the NITC/SSC over this period of our study. The DC only met once a quarter; and, unless issues arose which required the appearance of (specific) NITC/SSC members, they were not invited to attend. The presence of one or more DC members at NITC meeting was infrequent at best. While the MOA specified the role to be served by the DC with regard to the NITC/SSC ("The SSC and NITC will make decisions based on consensus. When a consensus cannot be reached, they will defer to the DC."), the implementation of this statement was: unless serious issues arose that demanded the presence of the DC, the NITC generally operated as a stand-alone governance body whose deliberations and actions were independent of directions and feedback from the DC.

We suspect that a potential reason for the DC to develop such a hands-off stance can be found in the composition of the DC. While the DC was comprised of the executive directors of each occupant unit of the new facility, IT was not an integral aspect of these executives' duties and most of them lacked sufficient knowledge of IT to grapple with the core issues to resolving disagreements regarding the SSC's roles, responsibilities, operations and governance. In other words, a lack of discourse was observed between the DC and the NITC/SSC precisely because of the deep differences in the nature of the DC membership (non-technical) and the NITC/SSC memberships (very technical). With no other body surfacing to mediate the strategic level and tactical/operational discourses, opportunities failed to arise for meaningfully examining and revising the SSC operating vision.

These conjectures point to the multi-level nature of a community (e.g., strategic, tactical, and operational levels) and the importance of the community carrying out a discourse regarding the organizing vision across all these strata. While community participants operating at distinct community strata are likely to have different interpretations of an initial organizing vision, it is only by engaging in effective discourse that a shared organizing vision meaningful to all participants can be developed. Recent research has begun to question the wisdom of establishing separate governance bodies at different strata rather than comprising a single governance bodies with active representation from multiple strata (Huang et al. 2010). While establishing multi-strata governance bodies raises challenges with governance deliberations and negotiations, it does ensure that discourse will occur across strata levels.

#### Chargeback Issues

In order to facilitate adoption the shared services concept in the new facility, it was decided to fully fund the first three years of the SSC off-budget. Thus, no relationship existed between the use of SSC services by the twelve work units housed in the facility and these units' annual budgets. Essentially, then, SSC-provided services were (over the time of our study) a 'free good' for these work units.

A primary responsibility of the NITC was determination of the portfolio of shared data and networking services to be provided by the SSC. As made clear in the following comments, the SSC specified the list of services they could provide and expected the NITC to decide which of the services would be provided:

"The SSC will provide a set of services. What services those are, is up to the NITC and the SSC to provide. In our charter [the MOA], we specified all the things that we felt the SSC was capable of doing and should be doing. If the NITC disagrees with some of those, and that's a conversation we can have to outline what they feel those tasks and responsibilities should be." (Interview with SSC member, 1<sup>st</sup> cycle)

NITC members as well understood that they needed to play a role in determining the services to be shared among all client entities.

"So at various levels is the role of the SSC – how much we want from them? That is where the NITC is supposed to come in and set that... the NITC should be able to set the priority to tell [the Directors Council]...I think

everyone wants a base level service and finding that grey area and that is the role of the NITC." (Interview with NITC member, 1<sup>st</sup> cycle)

However, the NITC did not actively engage the SSC in such a dialog:

"They (the SSC) need to define the service level agreements. That's my biggest concern. If you are going to provide the service to me, what can I expect out of that? What are the ramifications if something does happen bad? Are there going to be costs? Basically, it has to be detailed, very very detailed on the service level agreements." (Interview with NITC member, 3<sup>rd</sup> cycle)

Though well intended politically, upfront funding of the SSC for three years by the federal agency and the university seems to be a root explanation for the lack of initiative by the NITC to revise the organizing vision. Because of this 'seed funding', the short- and long-term funding for the SSC was essentially off the table at precisely the point in time when it was critical for the NITC membership to negotiate the SSC portfolio of shared data and network services. If the costs of providing these services were reflected in the twelve work units operating budgets, it may have produced the necessary 'creative abrasion' (Leonard-Barton 1995) motivating the NITC members to actively debate the SSC's organizing vision and its roles and responsibilities (Brown and Duguid 2001).

The IT chargeback literature argues that establishing meaningful and actionable policies on IT-related cost recovery can be a powerful determinant of users' accountabilities with regard to technology use decisions (Nolan 1977; Ross et al. 1999). Effective chargeback systems have been associated with an enhanced partnership between IT providers and users, their enriched mutual understanding, and more effective user decision taking with regard to IT products and services (Eccle 1985; Ross et al. 1999).

#### Organizational Consequences of a Weak Organizing Vision

To understand the consequence of a community's inability to evolve a strong, compelling organizing vision, we examined two aspects the use of SSC services by the NITC work units: NITC members' expectations regarding the services being delivered (Oliver 1980) and satisfaction with SSC as a service provider (Bhattacherjee 2001). As described earlier, positive trends were observed with both despite little progress on evolving a meaningful organizing vision. NITC members' expectations did converge over time and their satisfaction with the SSC did improve over time.

The temporal changes of NITC members' expectation and satisfaction may be explained by the expectationdisconfirmation theory (Oliver 1980), which argues that unrealistically high and low expectations tend to wear off over time (Szajna and Scamell 1993; Bhattacherjee and Premkumar 2004). We add to this explanation additional insight gained from the consequences of the absence of a strong, compelling organizing vision. We observed that the NITC members had, in fact, negotiated a service portfolio with the SSC ... but as individual work units rather than as a collective:

"The problem we have is there are too many people trying to tell one organization what to do, and everybody's got their own agenda, everybody has their own needs and requirements." (Interview with NITC member, 3<sup>rd</sup> cycle)

"I think things that have been handled well have really been on the individual basis. I don't think they've been really on the corporate basis. I don't think there's been any broad spectrum guidance from the NITC to the SSC other than communicating more with us." (Interview with SSC member, 3<sup>rd</sup> cycle)

Much of the meaningful interaction between the NITC members and the SSC members occurred outside of NITC meetings as one-on-one communications and negotiations. The NITC members (and their work unit colleagues) all too often bypassed the in-place governance body, making side deals with the SSC to get the service they desired (but not necessarily needed) with the SSC not infrequently adding individually-negotiated new types of services. This inability of the NITC to serve as a coherent governance forum was recognized by the NITC members:

"I think the NITC has been good at communicating the needs of the various units that we represent. However I don't think that we have presented a coherent enough voice at times." (Interview with NITC member, 3rd cycle)

As a result of these one-on-one agreements, community members moved away from the spirit of the original shared service concept of the SSC providing a consensus-determined set of common services:

"I do not think you should try to achieve consensus, because some services may make sense for some departments to outsource (for example, web posting), but may not make sense to others because they need to provide real-time data on the web." (Interview with NITC member, 2<sup>nd</sup> cycle)

We surfaced three possible explanations for this emphasis on one-on-one (rather than group) NITC/SSC negotiation. First, the governance system lack strong leadership. NITC leadership was essentially voluntary in nature and the DC provided minimal guidance to the NITC. As a consequence, the NITC abdicated much decision making to the SSC (which was incented politically to enlarge its service portfolio and rewarded for its operational performance rather than for establishing effective administrative policies and procedures). Second, the twelve work units housed in the new facility had experienced little collaboration in the past. (Remember, inducing such collaboration was the main reason for housing these work units in the same facility). Each work unit functioned well on its own, and the intended research collaboration would be beneficial but not critical for these work units' on-going success. NITC members' ambivalence toward this goal of inter-unit collaboration (e.g., it sounds good on paper but is awful hard to achieve in practice) may have dampened their enthusiasm for configuring the SSC as a platform for collaboration:

"It's going to take this group (the NITC) a long time to work it out, because there is very little trust between all these organizations. So there is not a desire to get together and share. So these things take a long time to evolve." (Interview with SSC member, 2<sup>nd</sup> cycle)

Third, the SSC remained adamant regarding an objective to put in place a single service level agreement for all twelve work units:

"Our goal is to have one Service Level Agreement. Having multiple SLAs with multiple groups is difficult to execute. It is the easiest thing to achieve, it's difficult to execute. We look at the long-term relationship we are going to have, my goal is not to get the easiest achievable thing, but to get the correct thing, and that is less difficult to execute in the long term." (Interview with SSC member, 1<sup>st</sup> cycle)

However, some NITC members (mostly from federal agency work units) expressed considerable dissatisfaction with this goal of a single service level agreement:

"It's pretty off balance (in terms of the usage of network services provided by the SSC). It's like 90% university and 10% federal. The lease cost is the same for all the entities. Part of that cost goes to the network and everything else...There has been a lot of talk, a lot of...I can't think of a word...federal- and actually the state-split networks, and have two completely separate networks. Words just came up several times. That would solve all of the problems." (Interview with NITC member, 2<sup>nd</sup> cycle)

While it might seem very reasonable for the SSC to offer the work units tiers of service (some at a base charge paid by all and others on a fee-for-service basis), this alternative was never raised by either NITC or SSC representatives at NITC meetings.

Without a strong and compelling organizing vision (along with the discourse involved in evolving this organizing vision), community members' taken actions regarding a focal innovation may be guided predominantly by their individual agenda rather than by mutually-agreed-to community objectives. When this focal innovation represents a community asset (such as a shared services unit), the consequence of this individualized decision-taking are likely to compromise of the economies of scale and scope associated with the community asset.

#### **Discussion and Conclusion**

Our research has surfaced explanations regarding why an organizing vision may fail to gain traction across a community as well as illustrated possible consequences of a failed organizing vision on the deployment of a new innovation across the community. Here, we provide our thoughts regarding (1) the consequences to a community being unable to evolve a strong and compelling organizing vision regarding an innovation characterized by considerable potential community value, and (2) the steps that can be taken by a community to produce a strong and compelling organizing vision for such an innovation.

#### In the Absence of an Organizing Vision

We have gained fresh insights from this study about how a community copes with and reshapes an innovation in the absence of an organizing vision. Lacking a consensual, shared interpretation of the innovation, community members are unlikely to take action collectively regarding the innovation but instead are most likely to take actions determined primarily by self-interest. Such a consequence highlights the important role served by an organizing vision in coalescing and enforcing community practices: In order for a community's members to formulate and take collective action regarding an innovation, these members must share common interpretations of both the value of the innovation to the community and the value of the community-side 'social goods' for individual members. Such content, thus, must take precedence within an evolving organizing vision. Such an observation is consistent with prior research on organizing visions that affirms: the centrality of an organizing vision to decisions and actions affecting the development and diffusion of an innovation within a community (Swanson and Ramiller 1997), and a recognition that underdevelopment of an organizing vision at an early stage in an innovation's development and diffusion may significantly inhibit its later adoption and institutionalization across a community (Currie 2004).

Another learning from our study is that with the lack of senior leadership exerting strong influence on a community's interpretation of an innovation, the interpretation that does evolve (though likely incomplete and disjointed) is largely determined through informal, one-on-one interactions and the taken-actions of individual community members in carrying out their day-to-day operational activities. While such a bottom-up approach may be successful in shaping members' mutual expectations about and satisfaction with the innovation, in the absence of a strong and compelling organizing vision, it is most likely that community adoptions and reinventions of the innovation will satisfy each member's vested interests to a much greater extent than community-wide interests. While our data disallow us from examining the effectiveness of top-down or middle-out approaches the evolution of an organizing vision, research evidence indicates that community, organizational and individual learning about an innovation must build on one another through widespread community discourse (Wang and Ramiller 2009). We expect learning about an innovation at all levels across a community would be greater with top-down or middle-out (or, perhaps best, a combination of both) approaches to organizing vision evolution.

#### Producing a Consistent Organizing Vision across Multiple Community Levels

Swanson and Ramiller (1997) discussed the development of an organizing vision in terms of how it can be shaped by and reciprocally shape several institutional forces as a community idea. They identified the community's discourse as a developmental engine for the institutional production of organizing visions, along with other factors providing the discourse with its content, structure, motivation, and direction, stressing that the earliest stages of innovation diffusion were critical with regard to both the shaping of an organizing vision and its influence of the innovation's diffusion across the community. While subsequent work by Swanson, Ramiller and others has furthered our collective understandings of the nature and role of an organizing vision, the current study contributes to the development of these ideas by introducing the reality that community processes and associated discourses play out at multiple hierarchical levels. More specifically, our findings indicate that a community's discourse regarding an organizing vision must actively involve each hierarchical level, and the evolving organizing vision must be interpretable by and meaningful to community members populating these distinct hierarchical levels.

We conjecture that, especially early in the development of an organizing vision, it may provide useful to craft multiple versions – maintaining an internal consistency across all versions – of the organizing vision with specific versions targeted at specific community constituencies. Owners should exist for each of these versions, and these owners must collectively engage in regular discourse to insure cross-version consistency. As a consensus interpretation of the innovation coalesces across a community's constituencies, the number of distinct versions may decrease over time - ideally ending with a single version that is interpretable and meaningful to all community members.

In order to maintain the consistency of an innovation's organizing vision across multiple community levels, it is important for powerful institutional groups within the community to evoke clear and consistent messages about their commitment and support to the organizing vision (Currie 2004). In practice, hence, community members at a strategic level should actively engage with those at the tactical and operational levels; and, innovation champions must arise at each level to interact with their peers at other levels.

During the course of any organizational changes induced by an innovation's deployment across the community, meanings constructed within and between individuals are exposed to reconstruction. Both these organizational changes and member's interpretations of these changes are mediated through social interactions, from which both expected and unexpected outcomes result (Balogun 2006; Balogun and Johnson 2005). An organizing vision serves as a primary vehicle for the "collective sensemaking" (Kirsch 2004) that ideally occurs regarding an innovation and its deployment and subsequent outcomes associated with this deployment. This is especially the case in contexts where control is ambiguous (Serafeimidis and Smithson 2003). As an innovation's diffusion unfolds over time,

individual interpretations of the innovation are confirmed or disproven, resulting in an aura of "truth" (Klein and Ralls 1997). It is thus important, especially at the formative stage of an innovation's diffusion across a community, that the organizing vision is enforced and shaped through managerial practices, as evident by the behaviors and discourse that occur across (both vertically and horizontally) a community's constituencies and hierarchy.

#### **Conclusion**

Our findings suggest that in the absence of a strong and compelling organizing vision, the diffusion of an innovation that has the potential to provide value as a 'social good' across a community is likely to fall prey to community members vested interests such that much of the promised community-level social good fails to materialize. Our findings also suggest that in order to produce a strong and compelling organizing vision, it is important that (1) leaders across a community's hierarchy rise to champion the development and evolution of an organizing vision (for a focal innovation) that is interpretable and meaningful to all community members and (2) adequate 'creative abrasion' within the innovation-community context to motivate members to engage in the rich discourse required to negotiate reinvention processes as the innovation is deployed across the community.

We hope these observations and insights prove useful to both scholars and managers interested in better understanding how innovations promising to serve as valuable community assets are developed and deployed across communities.

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