INNOVATION THROUGH STORYTELLING IN THE FAMILY-OWNED BUSINESS

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ABSTRACT

Innovation and learning are both considered vital for a firm's ability to prosper. In studies of organizational culture, the family-owned business is a unique context that provides the opportunity to study the tension between exploitation and exploration in the learning and innovation processes. Organizational stories are one way in which cultures are sustained over time. This paper examines how storytelling might enable learning and innovation within the family-owned business. The I-Space offers a conceptual framework incorporating the elements of culture, learning and innovation by which to examine these issues.

Keywords: Innovation, Family-Owned Business, Storytelling, I-Space, Culture

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Much of the research pertaining to innovation can trace its roots back to the 1934 publication of Schumpeter's *The Theory of Economic Development*. Scholars have drawn upon his definitions of innovations—new combinations of new products, new qualities of products, new methods of production, new markets, new sources of supplies of new raw materials or half-manufactured goods, or implementing new organizations of any industries (Hagedoorn, 1996) and also creative destruction (Boisot, 1995a; 1995b)—to investigate a myriad of topics. Since Schumpeter's original work, scholars have analyzed innovation in many contexts, but the early 1990s saw a significant increase in the number of organizational studies on the topic (e.g., Boisot, 1995a; Hagedoorn, 1996; March, 1991). Given the changing organizational landscape—intensified globalization, information technology, rates of change, and numbers of competitors—during that time, the growth in innovation research was not surprising.

Today, many scholars consider innovation to be required for competitive advantage (Abernathy & Clark, 1985; Boisot, 1995a; 1998). Despite its pervasiveness within the field, however, addressing the intricacies of innovation remains a challenge. In 1991, March described a tension between exploration and exploitation, concepts which he defined in terms of innovation versus stability. The tension identified then continues to provide a topic of study today. This paper proposes that the I-Space (Information Space) framework (Boisot, 1995b, 1998; Boisot, MacMillan & Han, 2007) offers a lens by which to analyze and perhaps address these tensions through a theoretical examination of organizational storytelling as it impacts learning and innovation within family-owned businesses.

In a family-owned business, the cultural business knowledge, or "how we do things here," can be as critical as the operational knowledge to maintaining business integrity and the sense of stability, continuity, and character these businesses often epitomize (Chua, Chrisman, & Sharma, 1999; Dyer, 1988; Welch & Welch, 2009). These aspects of the family business culture often garner the loyalty and dedication of family members and non-family members alike. Thus, maintaining cultural knowledge through change is critical to the continued prosperity of this type of business.

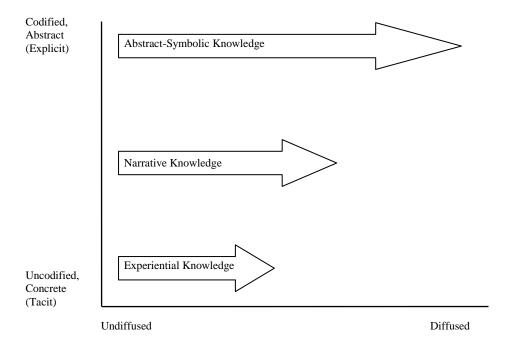
A wealth of organizational culture literature exists which examines the development and sustainability of organizational values and beliefs (e.g., Barney, 1986; Peters & Waterman, 1982). The enduring nature of values and beliefs, often established by the founder in the family-owned business, contributes to the sense of stability. Narrative offers a way to preserve the values and beliefs that are inherent in cultural knowledge. In organizations, narrative provides the bridge between experiential and abstract-symbolic knowledge (Boisot, 1995b, 1998), with narrative understood as any type of communicative process. Within the overarching concept of narratives, organizational stories are a subset that serve a particular purpose, such as transmitting values or maintaining the firm's culture. While benefits to maintaining cultural knowledge exist, how does the family-owned business address the inherent tension between its characteristic stability and its need for learning and innovation?

The I-Space offers a conceptual framework within which to examine this question. The I-Space shows the interaction of cultural, learning, and innovative elements through the use of narrative which permeates most businesses. Family-owned businesses are no exception, and perhaps offer a richer context within which to study this tension as their stories provide a link between past and current generations of both family members and non-family member stakeholders. Additionally, family-owned businesses have an identifiable culture which is distinct from that of non-family businesses (Dyer, 1986; Nicholson, 2008), making them an ideal starting point for a study of stability versus learning and innovation within the I-Space. By examining a viable, fifth-generation, family-owned business, this paper focuses on the use of storytelling in family-owned businesses to explore how stories may safeguard values and beliefs while at the same time contributing to innovation through the learning process.

1.0 CONSTRUCT EXPLANATION

The I-Space is a conceptual framework that demonstrates the flow of knowledge in organizations by determining where the knowledge assets are located along three axes: diffusion, codification and abstraction (Boisot, 1995b; 1998) (note: the figures in this paper combine the axes of codification and abstraction). Experiential knowledge, similar to what is often referred to in the literature as tacit knowledge (Nonaka, 1994; Polanyi, 1966; Tsoukas, 2003), is undiffused, concrete and uncodified, making it viscous and difficult to transmit to others. Narrative knowledge is increasingly structured (both codified and made more abstract), and diffused as individuals communicate with others in the organization, often in a problem-solving mode. Abstract-symbolic knowledge becomes highly structured as it is codified and made abstract. The codified nature of this type of knowledge bears a resemblance to what is often referred to in the literature as explicit knowledge (Nonaka, 1994; Tsoukas, 2003). Due to its structured nature, abstract-symbolic knowledge is also the most diffusible of the three types of knowledge described.

Figure 1.0 I-Space Framework with three types of knowledge



1.1 Learning in the I-Space

Underlying the actions one takes in the world, whether at an individual or corporate level, are the assumptions about how the world works. In the learning theories described within the I-Space framework, Boisot (1998) describes these assumptions about knowledge as "cumulative" versus "paradigmatic" (p. 93). The cumulative assumption views knowledge as a collection of facts and theories that builds up over time in a fairly stable process. The purpose of this process is to eliminate errors while creating a hierarchical knowledge base that can be exploited by the firm as a repository of knowledge. In a paradigmatic approach to knowledge, the creation process is viewed as cumulative *within* a particular paradigm. However, alternate facts may arise within new paradigms, perhaps destroying old knowledge and giving rise to new areas of knowledge. A key assumption inherent in the paradigmatic knowledge view is that the data and facts themselves do not constitute knowledge, but they give rise to patterns that are interpreted by human agents who themselves construct the resultant knowledge. The process of shifting from one paradigm to another was described by Kuhn (1962) as the way that scientific knowledge progressed over time.

The assumption of the cumulative view of knowledge as stable and predictable echoes the Newtonian view of a world that moves toward equilibrium and stability in a linear fashion (Boisot, 1998). This worldview still underpins many of the current assumptions in management sciences. Boisot terms this neoclassical view of knowledge, "N-learning" (p. 98), describing it as a learning process that is essentially cumulative and stabilizing. In terms of its predilection to reduce uncertainty by eliminating variety and choice, N-learning is similar to what March (1991) describes as exploitative learning.

While there are obvious advantages to developing a knowledge base through learning that enables organizations to avoid "reinventing the wheel," the disadvantage to such a process is that it can develop a certain inertia and make it more difficult to detect errors that become embedded within the knowledge base. Due to the bias in N-learning towards more structured, i.e. codified and abstract, types of knowledge, there is less value placed on tacit knowledge in the lower regions of the I-Space. An N-learning strategy thus focuses its learning processes in the upper regions of the framework.

In contrast to the N-learning approach, the assumptions of paradigmatic knowledge creation acknowledge the nonlinear, creative, complex process of learning that can often destroy old knowledge in the process of creating new forms of knowledge. Due to the similarity to Schumpeter's description of innovation as "creative destruction," Boisot (1998) terms this type of learning "Schumpeterian," or "S-learning" (p. 99). A major difference between N- and S-learning is the movement in S-learning into the tacit, i.e. highly concrete and uncodified, regions of the I-Space. Learning in these regions is inherently fuzzy, unpredictable, and complex. As agents go through the absorption, impacting, and scanning phases of the social learning cycle, they filter new knowledge through existing mental models. If the new knowledge confirms existing belief systems, then learning tends to be part of a stable process, as in N-learning. If, however, the new knowledge challenges existing mental models, this may create a discontinuity that generates a new round of learning. It is the disequilibrating impact of such discontinuities that may precipitate the creative type of S-learning that leads to innovation (Boisot, 1995b, 1998).

For March (1991), exploration in organizational learning includes activities such as "...search, variation, risk taking, experimentation, play, flexibility, discovery, innovation" (p. 71). The creativity inherent in such learning perforce is ambiguous, and ill-specified, often incorporating intuitive processes that are tacit and difficult to articulate. While the Slearning process operates at the lower uncodified and concrete regions of the I-Space, unleashing this creative potential, S-learning also incorporates the more defined, codified reaches traversed by N-learning. Hence, while N-learning exploits through diffusion the codified, abstract knowledge in the upper regions of the I-Space, S-learning supports the latent creativity of the firm by incorporating both exploratory and exploitative learning in the entire I-Space. March emphasizes the importance of balancing both exploratory and exploitative learning if firms are to prosper. In the I-Space framework, both N- and Slearning are part of an overall process known as the social learning cycle (SLC), consisting of the following phases:

- 1. **Scanning**: process of discovering and creating new patterns of knowledge from generally available, but ambiguous data. A creative process that may yield unique insights for individuals or small groups.
- 2. **Problem-Solving and Abstraction**: codifying process that gives structure and coherence to such insights. The newly codified insights are applied more broadly through a process of generalization.
- 3. **Diffusion**: process of sharing new knowledge with a broader population. Explicit knowledge diffuses more easily than tacit knowledge, with the latter requiring a shared understanding of context to enable diffusion of uncodified and concrete data.
- 4. **Absorption and Impacting**: the absorption process applies new knowledge by "learning-by-doing" or "learning-by-using" to new situations or contexts. During the impacting phase, abstract knowledge is embedded in concrete practices. These two phases often work in tandem (Boisot, 1998, pp. 59-61).

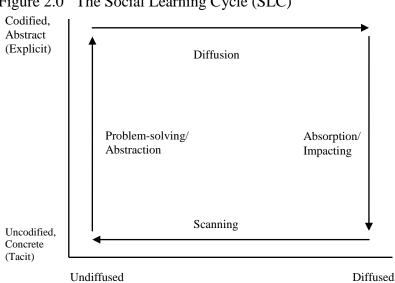
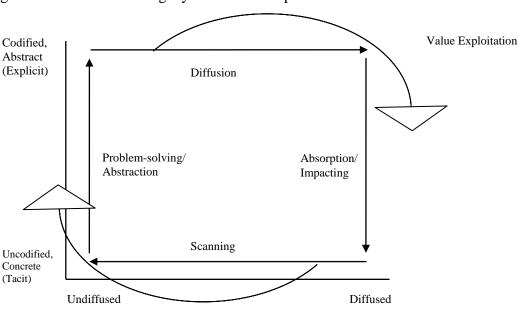


Figure 2.0 The Social Learning Cycle (SLC)

1.2 Innovation in the I-Space

The ultimate goal of any firm, including the family-owned business, is not only to survive but to thrive in a competitive environment. Many scholars point to innovation as a crucial aspect of a company's continued competitiveness (Abernathy & Clark, 1985; Boisot, 1995a, 1995b). Schumpeter was one of the first scholars to describe a theory of innovation (Hagedoorn, 1996; Sweezy, 1943), defining it not only as the creation of new products and services, but also describing the "creative destruction" often inherent in the process of destroying old knowledge while creating something new (Boisot, 1995a; 1995b). In more recent literature, scholars distinguish innovation that is disruptive from innovation that refines existing products. The former type of "radical" innovation (Nooteboom, 1999) is often an adaptive response to discontinuous stimuli, and incorporates the process of creative destruction described by Schumpeter (Bessant, Lamming, Noke, & Phillips, 2005). It requires learning that can operate in an environment of uncertainty and ambiguity (Boisot, 1998). The latter type of innovation has been termed "steady state" (Bessant, et al., p. 1367), and may be the result of a more incremental learning process.

Central to Schumpeter's theory was the notion of the entrepreneur as the "personification of innovation" (Hagedoorn, 1996, p. 889). While large corporations may indeed foster a type of "collective entrepreneurship" (p. 893), the family-owned business is the epitome of the entrepreneurial firm with more than 80% of all businesses in the United States operating as small, family firms (Kirchhoff & Kirchhoff, 1987). In terms of the I-Space perspective, the entrepreneurial activity of "searching for new opportunities" (Hagedoorn, 1996, p. 890) occurs in the scanning phase of the social learning cycle. The absorption, impacting and scanning processes enable individuals to both learn and internalize knowledge, recombining it in ways to yield new insights. Without moving into the lower, more tacit, regions of the I-Space, new knowledge may not be deeply enough understood to generate innovation. Once in the lower regions, scanning, problem-solving and abstraction work together in an exploratory mode to create value, while diffusion, absorption and impacting result in the "exploitation of value" (Boisot, 1995b, p. 189) (See figure 3.0). In this context, the value creation process is considered analogous to innovation.



Value Creation

Figure 3.0 Social Learning Cycle – Value Exploitation and Value Creation

1.3 Culture in the I-Space

The study of organizational culture came to the forefront in the late 1970s (Ouchi & Johnson, 1978) and the early 1980s (Deal & Kennedy, 1982), and was given a strong voice by Schein's (1984) work which formally defined culture as "A pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration" (p. 12). Even prior to Schein's work, however, scholars had clarified that all organizations have a culture, be it strong, weak, or even acknowledged (Deal & Kennedy, 1982). The field of organizational culture has grown greatly since its acceptance by management scholars during that time, and like innovation, culture has begun to be viewed as a way of securing a competitive advantage in an increasingly global world (e.g., Barney, 1986; Peters & Waterman, 1982). Despite the emphasis on its significance, the concept of organizational culture has also had its critics, mainly as a result of its variability and the difficulty in managing it (e.g., Ouchi & Wilkins, 1985; Smircich & Morgan, 1982). Indeed, Sørenson's (2002) research revealed that strong-culture organizations do not have the flexibility to contend with today's volatile environments. Even with these criticisms, many organizations still seek ways to strengthen their cultures as research exists which has shown that organizations with strong cultures outperform those shown to have weak cultures (e.g., Kotter & Heskett, 1992).

Initially, some of the reasons given for strong cultures were attributed to homogeneity and stability (Schein, 1984). However, as cultural studies continued, scholars articulated contrasts between internal integration and external adaptation as well as contrasts between change and stability (Denison & Mishra, 1995). Thus, the identified tension between exploitation (stability) and exploration (change) within March's (1991) discussion on innovation exists within organization's cultures as well.

The concept of culture is also addressed in the I-Space literature, and in fact, plays a significant role. According to Boisot (1998), "culture remains the means by which nongenetic information is transmitted either within a given generation of agents or from one generation to the next" (p. 118). He goes on to describe the key components of all cultural definitions (be they group, organizational, regional, or national) as incorporating the "structuring and sharing of information" (p. 122). However, there is a bias within Western countries toward only that knowledge which can fit within the codified and abstract formulation. The SLC, incorporating both the external and internal elements of organizations in addition to their codification and diffusion of knowledge, within the I-Space seeks to address this issue. Additionally, the SLC connects learning directly to the tensions between integration and external adaptations, and change and stability described within organizations' cultures.

Within the I-Space, Boisot (1998) identifies four distinct institutions, each of which is categorized by the three dimensions of codified/uncodified, abstract/concrete and undiffused/ diffused. Additionally, they are characterized by their own unique transactions that occur by virtue of these dimensions, resulting in the cultures of bureaucracy, market, fief, or clan (see Table 1.0). These cultures can occur at group, or organizational levels and serve as vehicles for the various levels to "express their communication strategies" (Boisot, 1987, p. 102). Within this conceptual paper, the primary level of analysis is organizational.

Table 1.0 Institutions and Transactions in the I-Space (Boisot, 1998, p. 127)

Bureaucracies

- Information is codified and abstract
- Information diffusion is limited and under central control
- Relationships are impersonal and hierarchical
- Submission to superordinate goals
- Hierarchical coordination
- No necessity to share personal values and beliefs

Markets

- Information is codified and abstract
- Information is widely diffused, no control
- Relationships are impersonal and competitive
- No superordinate goals—each to his own
- Horizontal coordination through self-regulation
- No necessity to share personal values and beliefs

Fiefs

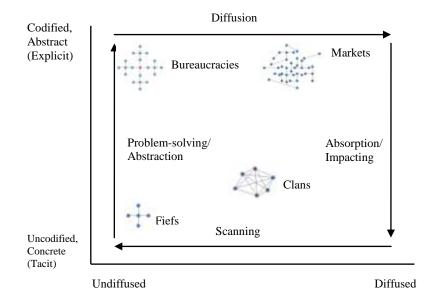
- Information is uncodified and concrete
- Information diffusion limited by lack of codification and abstraction to face-to-face relationship
- Relationships are personal and hierarchical (feudal/charismatic)
- Submission to superordinate goals
- Hierarchical coordination
- Necessity to share values and beliefs

Clans

- Information is uncodifed and concrete
- Information is diffused but still limited by lack of codification and abstraction to face-to-face relationships
- Relationships are personal but non-hierarchical
- Goals are shared though process of negotiation
- Horizontal coordination through negotiation
- Necessity to share values and beliefs

These organizational institutions provide not only cultural characteristics, but also a positional reference within the I-Space framework. They can also be situated within the SLC graph to reveal an even stronger connection between learning and culture (see Figure 4.0). It is of import to note that just as organizations move through the SLC, so too can organizations change their institutional position as they adapt and evolve over time.

Figure 4.0 The Overlay of Institutions and Transactions on the Social Learning Cycle



1.4 Family Businesses in the I-Space

When studying family businesses, one finds that the family corporate structure has endured to become the oldest and most wide-spread organizational structure in existence today. Despite their longevity, research on family business topics only came to the forefront of organizational studies in the early 1990s, a fact that has lead many scholars to consider the field to still be in its infancy (e.g., Bird, Welsch, Astrachan, & Pistrui, 2002; Venter, Boshoff, & Maas, 2005). Even though solid research into the topic has only developed recently, the significance of family businesses is not debated. Indeed, family businesses are considered one of the most important organizational structures operating today, impacting both economies and societies as a whole (Astrachan & Shanker, 2003).

For the purposes of this paper, however, the family business provides a practical starting point to begin an examination of the tension between stability and change as evidenced by organizational cultures, learning, and innovation processes. One of the primary rationales for utilizing a family-owned business is the identification of a culture unique to this type of business. These businesses have a character which sets them apart from non-family organizations wherein both family member employees and non-family member employees describe a unique sense of stability, continuity, and character (Chua et al., 1999; Dyer, 1988; Welch & Welch, 2009). Recent studies have termed characteristics unique to the family business as "familiness," (Chrisman, Chua, & Steier, 2005; Habbershon, Williams, & MacMillan, 2003; Tokarczyk, Hansen, Green, & Down, 2007). These characteristics have enabled many family businesses to achieve a competitive advantage. While studies of familiness do not specify a particular cultural element from any of the organizational culture models, they do strengthen the argument that organizational culture does provide a possible tool for sustaining family businesses.

The second reason for utilizing family-owned businesses as the organizational type for this conceptual paper ties directly to the stability mentioned as one of the primary characteristics of these businesses. Such an emphasis on stability begs the question of how these types of businesses continue to exist when, culturally, they seem to focus on exploitation with little regard for exploration. Indeed, family business scholars have focused much of their efforts on the failure of these businesses. A significant study in 1987 found that just 30% of family businesses pass to the second generation, only 12% transfer to the third generation, and a mere 3% operate into and past the fourth generation (Ward, 1987). Although more than twenty years have passed since Ward's original study, subsequent studies have confirmed his findings (J. H. Astrachan, personal communication, January 28, 2009), and still cite them in most family business research today.

In the institutions defined within the I-Space, both fiefs and clans evidence an emphasis on shared values and personal relationships, relating them to the cultural characteristics that typify most family businesses. The founder is often still present and visible within the organization, and as such, plays a strong part in establishing the culture of the organization (Schein, 1983). The founder falls in the category of entrepreneur, and is considered an innovator as a result (Hagedoorn, 1996). Thus, the previously described tension exists within this type of business as well as between stability and change, exploitation and exploration. The tension is exacerbated as these organizations evolve, grow, adapt, and transfer leadership to successive generations. Those businesses which grow and move into the third generation and beyond often find themselves moving into the more impersonal categories of either a market or a bureaucracy, and face challenges at

those stages as well. Examination of organizations within the various stages offers a rich field of study as a result.

1.5 Storytelling (Narrative) in the I-Space

The final construct, storytelling, provides the link between all of those previously discussed. An important aspect of storytelling is the stories themselves. Stories fall within the cultural element of artifacts within organizational culture models. The link between stories and organizational culture was established by Schein (1984) wherein stories were identified as an artifact of organizational culture. In looking at organizational culture, Schein defines artifacts as "all the phenomena that one sees, hears, and feels when one encounters a new group with an unfamiliar culture" (p. 25). Schein explicitly lists "myths and stories told about the organization" (p. 26) as one type of artifact.

Prior to Schein's work on the topic, Wilkins (1983) argued that while stories may be artifacts, storytelling is a third-order control in that it "transmit[s] shared values, frameworks, and assumptions" (p. 87). Thus, Wilkins' process of storytelling involves all three levels of Schein's (1984) model: artifacts, values, and assumptions. Subsequent research by Wilkins (1984) honed in on the link between stories and the transmittal of values explaining that "Stories are powerful vehicles for transmitting values because they exemplify and give concrete context to abstract values" (p. 59).

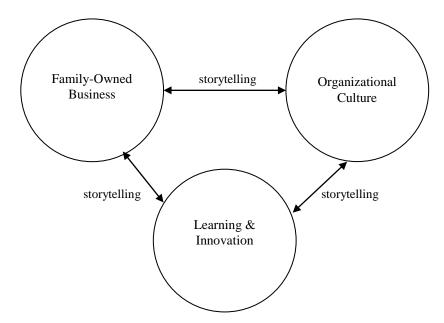
While the study of organizational stories stems back several years, "It might be argued that the story of organizational storytelling has just begun" (Barry, 1997, p. 31), and indeed, the topic remains a popular one of study. Scholars, however, explore organizational stories in their own unique ways, but most agree about their significance. Boje (1991), considered by many to be the key organizational storytelling scholar, was one of the first to articulate the importance of telling stories, claiming they are "the preferred sense-making currency of human relationships" (p. 106). Weick (1995) added to that conversation by explaining "that people think narratively" (p. 127). In fact, it is Weick's conceptual use of the term *narrative* that provides a direct link to the knowledge management context of this paper.

Boisot (1995b; 1998) proposes within his I-Space framework that narrative provides the bridge between experiential and abstract-symbolic knowledge, with narrative understood as any type of communicative process. Wilkins (1983) describes narrative as an overarching concept, which includes the function of stories, helping to maintain social structure. Witmer (1997), within her consideration of structuration in organizational culture, pulled from Giddens to define structures as "the rules and resources people use in social interaction" (Witmer, 1997, p. 326). Boisot (1998) described culture as "the structuring and sharing of information" (p. 122). Hence, stories are an artifact within the culture, and both culture and stories share a bond in structuration. Thus, in the context of this paper, organizational stories are considered a subset of narrative, with storytelling serving as a structuring tool to reciprocally interact with the firm's culture, learning and innovation processes.

2.0 CONCEPTUAL FRAMEWORK EXPLANATION

Within the preceding discussion, similarities between the various constructs were briefly mentioned. Those similarities now lead into a more developed consideration of how the constructs are linked together in a conceptual framework. The graphical depiction of the conceptual framework (see Figure 5.0) was developed based upon the connections perceived between the six constructs. The I-Space framework was then utilized as a lens to better understand the linkages within the conceptual framework. It is important to note that from the six constructs described, the conceptual framework has three primary constructs: learning and innovation, organizational culture, and family-owned businesses. Learning and innovation were combined as a result of the definitions of both N- and S-Learning wherein innovation tends to arise only as a result of S-learning strategies. Organizational culture was given its own space based on its importance within the I-Space framework. When Boisot (1998) describes the potential value of the knowledge asset (p. 119), he does so discussing how and in what context it exists, emphasizing the significance of the culture as distinct from learning and innovation. Finally, family-owned businesses are depicted as a primary construct even though the I-Space does not specifically consider family-owned businesses within its description. The argument, however, for the use of a family-owned business as a logical example within this model was previously made wherein these businesses have a unique and identifiable culture and the tension which exists within these types of businesses as they evolve over time incorporates stability and change.

Figure 5.0 Conceptual framework



As described, the three primary constructs—learning and innovation, organizational culture, and family-owned businesses—all evidence a tension between stability and change. While the types of stability and change within the respective elements will vary, the fact remains that all three have this identifiable tension. Thus, the use of these three elements as primary constructs makes sense.

As the conceptual framework shows, the reciprocal, unifying factor between these elements is that of storytelling. Storytelling was previously defined as a structuring process incorporating organizational stories. Storytelling also links organizational culture to

businesses, as scholars do not debate the existence of organizational stories within organizations through their respective cultures. Family-owned business scholars have rarely explored their organizational stories (*see* McCollum, 1992 for one exception), but there can be no doubt that organizational stories occur within these types of businesses. Family-owned businesses and cultural studies have both considered learning and innovation, and organizational storytelling scholars have considered organizational stories within both contexts as well. Within the I-Space, narrative knowledge bridges abstract-symbolic and experiential knowledge, and storytelling as described is a subset of narrative. Therefore, all of the major elements within this conceptual framework are linked to each other and, through storytelling, to the I-Space lens.

3.0 PROPOSITIONS

Organizational scholars have identified stability as one characteristic of organizational cultures (Denison & Mishra, 1995; Schein, 1984). Within the I-Space framework (Boisot, 1998), bureaucracies and markets are cultural types that result from the structuring process of abstraction and codification. In this same upper region of the I-Space, N-learning operates under the assumption of cumulative, stabilizing knowledge, exploiting through diffusion the structured knowledge assets that have built up over time. Organizational stories in bureaucracies and markets may indeed be incorporated into the N-learning strategy in diffusion, absorption and impacting phases of the SLC, thus exploiting the value of the firm's knowledge assets.

While stability has been identified as characteristic of the family-owned business, the need to adapt both internally and externally to dynamic environments requires firms to change or die. Family-owned businesses that are able to respond adaptively to this tension through S-learning, i.e. by operating the full social learning cycle, may have stories that support innovation and growth through exploration. These types of creative and innovative processes are most likely to be found in fiefs and clans within the I-Space perspective (Boisot, 1998).

Storytelling as a specific type of narrative knowledge mediates between both abstract-symbolic and experiential knowledge. In terms of the conceptual framework, as well, storytelling reciprocally links not just the organizational culture and the specific family-owned business culture, but also the type of learning and innovation that occurs. Looking through an I-Space lens at storytelling, one can see a possible means of mitigating the tension between exploration most characteristic of fiefs and clans in the lower regions of the I-Space, and the exploitation that typifies bureaucracies and markets in the upper regions. Family-owned businesses may seek to balance the tensions between stability and change by using stories to safeguard values in the support of a stable organizational culture, or by using such stories as an impetus for change, providing an indicator of the evolutionary process of the firm's culture (see Figure 6.0).

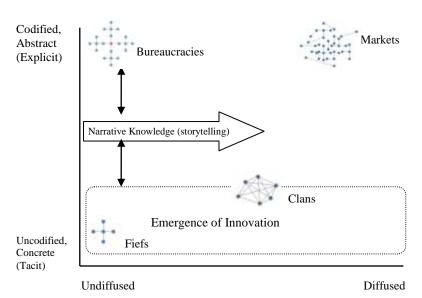


Figure 6.0 Innovation and Storytelling in the I-Space

The foregoing suggests the following proposition: storytelling is a specific type of narrative knowledge process that acts as a structuring device to:

- 1. Support cultural stability by emphasizing exploitative processes such as N-learning. Such stories tend to be found in bureaucracy and market cultures.
- 2. Act as an engine of growth and value creation through exploration in fief and clan cultures. These stories support the emergence of innovation.
- 3. Act as a bridge between cultural institutions of bureaucracies and markets, and fiefs and clans, simultaneously balancing the tension between stability and change.

4.0 AN EXAMPLE

To explore these propositions more fully, the decision was made to utilize a viable, fifth-generation family-owned business, with which both authors are familiar, as an example within the conceptual framework. Crops and Livestock, Incorporated (CaL, Inc.) (a pseudonym) was established in 1884 when its founder located the beginnings of his ranch in the Midwest. He began with cattle near his homestead and expanded to include a farming operation which focused primarily on hay, but also fruit trees. His son expanded the agricultural side of the operation to include horses and mules and worked to diversify the organization as well by investing in marble, tire, and oil and gas companies. While the investments in marble and tires were short-lived, the oil and gas rights continue to this day. The third-generation owner of CaL, Inc. made his own advancements to the organization. His foresight brought irrigation to an area sorely lacking in natural water resources and allowed for tremendous growth in the organization. Through his travels, he learned about concentrated cattle feeding operations (feedlots) and determined that the geographic location of their business made them an ideal fit for such an expansion. Based upon his ingenuity, the company positioned itself as one of the largest, non-custom feedlots in the nation by 1960. His son added his own touch to the organization by expanding into

concentrated hog feeding. Today, the organization is run by fifth generation co-CEO's—the sons of the fourth generation. The premature death of the fourth-generation owner moved them into their leadership position much earlier than they wanted, but they are finding their way and looking for how they will add their own flourish to CaL, Inc.

Analyzing this firm with an I-Space (Boisot, 1998) lens, such a family-owned business, created by an entrepreneurial founding father, is an exemplar of the type of start-up that begins as a fief. Power and authority was hierarchically concentrated in the hands of the founder, with a focus on shared values and beliefs, and face-to-face personal relationships. The training of the next generation took place within the context of a father-son relationship, a type of relationship exemplified in the early 1900s by the subordinate's (the son's) submission to the goals of the superior, in this case both father and company leader. The transmission of cultural as well as family values in the fief were uncodified, and concrete, with a limited diffusion to the population of employees within the small, family firm.

As CaL, Inc. was passed to successive generations and grew in both scope and size, hierarchical coordination of necessity evolved into a more horizontal type of coordination more characteristic of clans in the I-Space (Boisot, 1998). The continued leadership by family members likely contributed to the stability of shared values and beliefs despite the expansion of the business. However, this same expansion required more negotiation among parties to achieve common goals. Relationships, likewise, retained the personal nature of "familiness" as found in the family-owned business, but the strong, charismatic influence of the founding father was ameliorated over successive generations, resulting in relationships that became more non-hierarchical in nature. Finally, the S-learning aspect of the SLC that traverses the lower regions of the I-Space, the location of fiefs and clans, likely contributed to the innovation that has played an integral role in the lifecycle of this firm.

Throughout its 125 years of existence, CaL, Inc. has exhibited the unique characteristics of both stability and "familiness." Much of this can be seen in the stories told within the organization today. Employees often talk about past family members and discuss how they handled various situations. That connection to the family that is felt by non-family members is reinforced through those stories, even those who may not have known those family members personally. The stability of this clan culture would meet the criteria of exploitation; however, it has also seen exploration through growth and adaptation. The tension exists, yet it has not proved detrimental, as evidenced by the longevity of the organization.

5.0 IMPLICATIONS FOR FUTURE RESEARCH

As emphasized previously, this paper is conceptual in nature. While an example of a family-owned business was utilized with which both authors are familiar, no formal, empirical research has been done on this topic. However, in discussing CaL, Inc. in the context of the conceptual framework and the I-Space lens, numerous implications within multiple areas came to light which deserve further study.

First and foremost, the conceptual framework presented can be broken down and studied individually. More time could be spent examining the reciprocal storytelling link

between the various constructs: 1) organizational culture and learning and innovation; 2) organizational culture and family-owned businesses; and 3) family-owned businesses and learning and innovation. Within the context of this work, this exploration would be done within the I-Space framework. However, researchers need not be limited to only this lens. Other scholars have utilized differing lenses (e.g. "Ba" [Brännback, Carsrud, & Schulte, 2008]; "Organizational Learning as a Dynamic Process" [Crossan, Lane, & White, 1999]; "Spiral of Organizational Knowledge Creation" [Nonaka, 1994]) which might provide further research insights as well.

Implications also exist for the other constructs. For example, in the field of family businesses, scholars have primarily focused on the succession events as a key factor in organizational continuation, dedicating almost one-third of all family business studies to this issue (Sharma, Chua, & Chrisman, 2000, p. 234). Within this framework, it can easily be argued that the tension between stability and change, and the position of the family business within the I-Space has strong potential implications for family-owned business sustainability. The identified tension results in another question: If the fief or clan cultural type represents the majority of family-owned businesses, is it a conundrum that these organizations are thus described as being so stable when their position in the I-Space might indicate instability and/or change?

Considering the construct of storytelling, more time could be spent delving more deeply into the process itself. From this paper, questions beyond our scope and focus arose with regard to the types of stories told. Do different types of stories move a business into more exploration versus exploitation? Or perhaps do the stories focusing on stability offer a foundation which can be utilized as a springboard for exploration and innovation? Such studies have strong implications for the field of organizational studies where Barry (1997) argued that much research still needed to be done on organizational stories.

In a broader sense, implications arise concerning the levels of analysis. As mentioned, the four defined transactions and institutions of market, bureaucracy, fief, and clan, can occur at the group, or organizational level, or some combination therein (Boisot, 1987). This generates the following multi-level questions: At the individual level, what is the relationship between a stable system and the tendency to have an exploitative mindset? Likewise, is there a relationship between a system in flux and an individual's exploratory mindset?

Based upon these implications, we suggest that the conceptual framework presented within this work merits further consideration and study. It should be noted, however, that the implications listed do not comprise a complete list of research possibilities. In fact, the growing list lends strength to the argument for future empirical research on this topic.

6.0 CONCLUSION

March's (1991) article identified a tension between exploitation and exploration (stability and change) that occurs within organizational learning and impacts innovation. This tension, however, is not only present within this context, but exists within organizational culture and family-owned businesses as well, both of which experience and are affected by innovation as well. This conceptual paper has utilized this tension as a

common link between these constructs, and then used the process of storytelling to unite them into a conceptual model to address how storytelling might impact innovation. To further clarify the issue, the I-Space framework was utilized to show how organizations might evolve over time. Within the I-Space framework, narrative, of which storytelling is a subset, facilitates the flow of information throughout the learning process and assists in the evolution of the cultural transactions from fiefs to clans to bureaucracies to markets. As a result, the I-Space provided a logical theoretical lens to use in examining the impact of storytelling on the tension inherent in innovation. Family-owned businesses provided a plausible context because of their identifiable culture and experience with the innovative tension being addressed within this work. Additionally, the authors shared a familiarity with one such business which further strengthened the use of family-owned businesses as a context and offered a fitting example to investigate the articulated propositions.

Despite the information presented, there can be no doubt that further research is needed on this topic. The conceptual framework presents many opportunities for additional studies, and many organizational learning lenses exist which could be employed to delve more deeply into the proposed framework. Finally, this paper utilized family-owned businesses as the context, but the information may have implications for non-family businesses as well. Thus, this work offers a rich foundation for further studies into the topic of storytelling and innovation.

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