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A Cultural Sociology Perspective on IT Occupational Culture

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ABSTRACT (REQUIRED)

Cultural studies have played an important role in information systems (IS) research for over 25 years. Past IS studies have primarily focused on two levels of analysis: national culture and organizational culture. The gap in our knowledge of culture is in the area of occupational culture of IT professionals. IT professionals have their own distinct occupational culture with their own set of shared values. The 'strong program' of cultural sociology will be used to examine and interpret the meaning of the core shared values of the IT occupation. The cultural framework of shared language, shared history, and shared context will be utilized in this research-in-progress.

Keywords (Required)

IT occupational culture, cultural sociology, organizational culture, values

INTRODUCTION

IS research on culture over the last 25 years has focused on two levels of analysis: national culture and organizational culture (Leidner and Kayworth, 2006). Research at the level of occupational culture has not received as much attention and is a growing area of study. The proposed research area addresses the occupational culture of the IT profession. While culture has many definitions and perspectives in IS studies (Leidner and Kayworth, 2006; Kappos and Rivard, 2008), the deeper view of cultural sociology has not been used previously to study IT occupational culture. Occupational culture is a specific culture shared by members of the same profession who have similar values, speech, and behaviors (Trice, 1993). Values are a core element of any cultural group (Deal and Kennedy, 1982; Hofstede and Hofstede, 2005; Brief and Nord, 1990).

The study of IT occupational culture is important because it defines expected behavior and shared meaning within an organization (Nord et al., 2007) as well as impacts IT outcomes and their success or failure (Pliskin et al., 2003; Iivari and Huisman, 2007; Walsh, 2009). IT has its own occupational culture that is distinct from organizational culture (Trice, 1993; Ramachandran and Rao, 2006; Nord et al, 2007; Guzman et al., 2004) and this is the level of analysis being used in the current study. Leidner and Kayworth (2006) point out that "what has received the least amount of attention in the literature on IT and culture is the very notion of an IT culture" (p.371). Karahanna, Evaristo, and Srite (2005) say that "the role of values in attitude models in IS research has been largely ignored, possible due to the fact that most research was performed in single cultures (both organizational and national)" (p. 9).

Kaarst-Brown broke ground on the idea of IT culture in her grounded theory of IT culture within two organizations (Brown, 1995). Guzman (2006) tilled this soil by examining the effect of IT occupational culture on occupational commitment. This research-in-progress proposes to dig even deeper and propose a new nomological network of constructs based on cultural sociology for studying IT occupational culture by investigating the interrelationships between shared values, shared history, shared language, and shared context. The research questions for this study include the following: *What are the core shared values of IT occupational culture? How have these particular shared values developed out of shared language, shared history, and shared context?*

THEORETICAL FOUNDATIONS

What is culture?

Culture is commonly understood as simply 'the way things are done around here' (Schein, 1999). Culture can consist of the categories and plans for action shared by a group as well as the shared understandings people use to coordinate their activities (Harper and Lawson, 2003). Hofstede defines culture as "the collective programming of the mind that distinguishes the members of one group or category of people from others" (Hofstede and Hofstede, 2005, p. 4), and this is one of the most popular definitions in IS literature (Leidner and Kayworth, 2006). Despite the obvious appeal for an IS audience, Hofstede emphasizes that despite the computer analogy, people are not programmed in the same way that computers are. Clifford Geertz, noted anthropologist, says "The concept of culture I espouse. . . is essentially a semiotic one. Believing, with Max Weber, that man is an animal suspended in webs of significance he himself has spun, I take culture to be those webs, and the analysis of it to be therefore not an experimental science in search of law but an interpretative one in search of meaning" (Geertz, 1973, pp. 4-5). Culture is important because it provides meaning, makes life more predictable, and creates a stable, cohesive social group (Schein, 1999; Deal and Kennedy, 1982).

Culture may be broken down into different components according to different frameworks including values, beliefs, norms, and material components (Ferrante, 2003), values, symbols, heroes, rituals, and practices (Hofstede and Hofstede, 2005), espoused values, artifacts and unconscious assumptions (Schein, 1999), and values, heroes, rites and rituals, and the environment (Deal and Kennedy, 1982). While there are numerous conceptualizations of culture in the literature, a concise sociological definition of culture that is useful for this study is "a patterned sphere of beliefs, values, symbols, signs, and discourses" (Smith and Riley, 2009, p. 2). The common element in these cultural frameworks is *values*. Values are shared conceptions of what is good, right, appropriate, worthwhile, and important with regard to human behavior (Ferrante, 2003). Values are broad tendencies towards certain states of affairs over others and address what is evil versus good, forbidden versus permitted, and abnormal versus normal (Hofstede and Hofstede, 2005). The core of culture is formed by values because values are more stable than practices (Hofstede and Hofstede, 2005). Because values are the core of culture (Deal and Kennedy, 1982; Hofstede and Hofstede, 2005; Brief and Nord, 1990) and most IS research related to culture at any level focuses on value systems (Leidner and Kayworth, 2006), this study also attempts to pinpoint a value system, but at a new unit of analysis, that of the occupation.

Sociological literature

To fully address what occupational culture entails and how it should be studied requires a brief genealogy of sociological literature. The roots of studying culture in the context of work and occupation run deep in sociology, beginning with the 19th century founders of modern sociology, Emile Durkheim and Max Weber.

Durkheim's *The Division of Labour* (1893) dealt with issues of social cohesion in a time of increasingly rapid social and economic change (Grint, 1991). Where 19th century thinkers were fearful of the imminent collapse of society due to changes in occupation and urbanization of life, Durkheim asserted that social cohesion was being reconstructed into new forms based on the increasing division of labor (Grint, 1991) and new occupational social groups (MacDonald, 1995). He saw occupations as an important stabilizing element of society in times of change in that they preserve and pass on cultural traditions (MacDonald, 1995). Durkheim used terms like 'collective conscience' and 'collective representations' rather than 'culture' when talking about shared moral awareness and shared social life (Smith and Riley, 2009; Peacock, 1981; Korczynski et al., 2006). Society is a moral phenomenon for Durkheim, held together by distinctions between sacred and profane elements which ensure the survival of a smoothly functioning society (Smith and Riley, 2009).

Weber's (1904) *The Protestant Ethic and the Spirit of Capitalism* focused on the interplay between religion and occupation. Economic success becomes a sign of heavenly salvation (Smith and Riley, 2009) while wastage of time at work becomes the deadliest of sins in the 17th century (Brief and Nord, 1990). Bureaucracy and rationality were becoming more important, in Weber's view, than any kind of transcendent meaning and work life was losing its sense of purpose by the 19th century (Smith and Riley, 2009). Meaningless bureaucracy at work is described vividly as an 'iron cage' devoid of freedom (Weber 1930). For Weber, occupational status groups became more important for explaining social action than class (Grint, 1991). Status groups have a common 'style of life', shared customs, conventions, and training which grant them prestige (Smith and Riley, 2009). Where Durkheim emphasized the objective nature of external social reality, Weber denied the presence of any social laws that were similar to natural laws (Grint, 1991). The interpretive method of *verstehen* (deep understanding) is necessary for studying collective ideas because sociologists are faced with thinking subjects, not inanimate objects (Grint, 1991). *Verstehen* means the observer must attempt to reconstruct the subjective meanings out of social action, including cultural values and shared histories (Smith and Riley, 2009).

Maurice Halbwachs, a student of both Durkheim and Weber, emphasized the role that collective memory has on culture (Halbwachs, 1925). Collective memory is not literal history, but the shared interpretation of history that was experienced and lived by a social group (Halbwachs, 1925). He used the Durkheimian view of collection representations to identify how people mythologize their own pasts (Coser, 1992). Collective memory is a cohesive force for a social group because it identifies the group's origins (Coser, 1992). Collective memory is continually reshaped with each generation (Smith and Riley, 2009). Collective memory, for Halbwachs, is specifically transmitted through shared language. Language affects culture by articulating its values and beliefs. Occupational groups have their own memories that their members have constructed over a long period of time (Coser, 1992).

Talcott Parsons was the first to synthesize the work of both Weber and Durkheim (Smith and Riley, 2009; Timasheff, 1967). Parsons theorized that values had to be the central component of social action in order for groups to stay cohesive (Alexander, 2003). Parsons proposed that by internalizing values, people align their actions with those of others (Smith and Riley, 2009). Parsons was also the first sociologist to address different value dimensions that could be analyzed separately (Smith and Riley, 2009). Parsons agreed with Durkheim that modernity has *not* eroded meaning in society (Smith and Riley, 2009). However, critics of Parsons say that his functionalist treatment of values was "denuded of musicality" and "without a counterweight of thick description, we are left with a position in which culture has autonomy only in an abstract and analytic sense" (Alexander**,** 2003, p. 16).

Clifford Geertz moved away from Parsons' stiff views of values in favor of a richer hermeneutic description of the complexities of culture. The hermeneutic approach of doing thick description requires the writer to capture a wealth of cultural detail and draw in the reader with a sense of being there both intellectually and emotionally (Geertz, 1973; Smith and Riley, 2009). Geertz' method has attracted followers like Jeffery Alexander and the 'Yale Strong Program' which combine elements from Durkheimian structuralism with Geertz' emphasis on thick description (Smith and Riley, 2009). Alexander suggests that structuralism and hermeneutics can "be made into fine bedfellows" (Alexander, 2003 p. 26). Alexander and his colleagues reject examining cultural content through structure alone, but incorporate 'eruptions of the sacred' to form a meaningful explanation (Smith and Riley, 2009). The strong program of cultural sociology has three criteria for researchers: 1) Culture must be an autonomous construct, i.e., an independent variable. 2) Geertzian thick description hermeneutics must be used to decode narratives and symbols and avoid abstract un-meaningful values; ("The weak program fails to fill these empty vessels with the rich wine of symbolic significance" Alexander, 2003, p. 22.) And 3) the strong program seeks empirically-supported causal clarity about the theoretical relationships between culture and action (Alexander, 2003). Alexander's strong program "represents one of the more intellectually ambitious of recent theoretical frameworks for cultural analysis" (Smith and Riley, 2009, p. 193.)

The strong program of cultural sociology is particularly appropriate for examining IT occupational culture because of the way it can tie technology, culture, and work together. Examples include issues of why we work so hard when technology should save us from work and why we are so obsessed with technology (Alexander, 2003). "We need narratives if we are to make progress and experience tragedy. We need to divide the sacred from the profane if we are to pursue the good and protect ourselves from evil. Technology is not only a means. It is also an end…" (Alexander, 2003, p. 4). The IT occupation is at the heart of this narrative.

IT Occupational Culture

Occupational culture consists of values, norms, and symbols where values are the most basic beliefs (Greenwood, 1972). Trice (1993) offers a comprehensive framework of the characteristics of occupational culture. Occupational cultures exist apart from organizational culture and can become a source of conflict due to their culture differences. Six characteristics that separate out an occupational culture are identified as 1) Esoteric knowledge and expertise, 2) Extreme or unusual demands, 3) Consciousness of kind, 4) Pervasiveness, 5) Favorable self-image, 6) Primary reference group, and 7) Abundance of cultural forms (Trice, 1993). What is absent from Trice's conceptualization is an emphasis on shared values.

Trice's framework has been used in more recent IS literature to verify that there is, indeed, the existence of such a thing as 'IT occupational culture' because it conforms to these six characteristics (Guzman et al., 2004; Guzman and Stanton, 2004; Guzman et al. 2006; Ramachandran and Rao, 2007). For example, esoteric knowledge and technical jargon are prime examples of what separates IT people from other people in an organization. While the core area of values is absent from Trice's conceptualization of occupational culture, it serves as a useful description of the shared *context* of occupational groups.

An early attempt to study the shared values and beliefs of IT culture empirically is Kaarst-Brown and Robey (1999). Five archetypes of IT culture were developed from their ethnographic case study of two organizations using the metaphor of magic to explain differences in IT cultures. The five archetypes include Revered, Controlled, Fearful, Integrated, and Demystified (Kaarst-Brown and Robey, 1999). There are advantages and disadvantages to each of the five cultural

archetypes which lead to the idea that some IT cultures are more disposed to organizational success than others (Kaarst-Brown and Robey, 1999). The study was interpretative and they emphasize that "rather than dividing the construct of IT culture into distinct dimensions, our approach is to describe them as coherent wholes through the use of metaphor" (Kaarst-Brown and Robey, 1999, p.213). This ground-breaking study focused on the idea of IT culture within particular IT departments, whereas IT occupational culture is a broader concept covering the entire occupation across different organizations. In other words, IT occupational culture manifests itself within the IT culture of a particular IT department within an organization.

Guzman et al. (2007) and Ramachandran and Rao (2006) have built on Trice's framework by identifying IT as having its own occupational culture in qualitative studies. Nord et al. (2007) review seven different models for assessing IT culture, including Trice's framework, and select the cultural web model to identify the characteristics of IT culture including 1) Organization structure, 2) Stories and myths, 3) Symbols, 4) Rituals and routines, 5) Control systems, and 6) Power structures. These characteristics form a web that interacts to form IT culture at the group level, a culture which is separate and distinct from that of the overall organization (Nord et al., 2007). However, shared values are missing in the cultural web model.

Finally, Walsh and Hefi (2008) and Walsh (2009) have begun examining IT culture at the individual level. In their view, IT culture is one of many layers of culture that impact an individual within the metaphor of a spinning top (see Figure 1). The 'spinning top' metaphor is an extension of the 'virtual onion' metaphor for culture described in Straub, Loch, Evaristo, Karahanna, and Srite (2002). IT culture is defined extremely broadly as something that all users of IT participate in, rather than just IT professionals (Walsh, 2009). Where Walsh's timely work on IT culture is related, in this study we are keeping the level of analysis at the occupational level in order to keep within the tradition of examining culture as a set of *shared* values by a *group* of people. We define IT occupational culture as a web of occupationally-shared values based on shared language, shared history and shared context that are unique to the IT occupation.
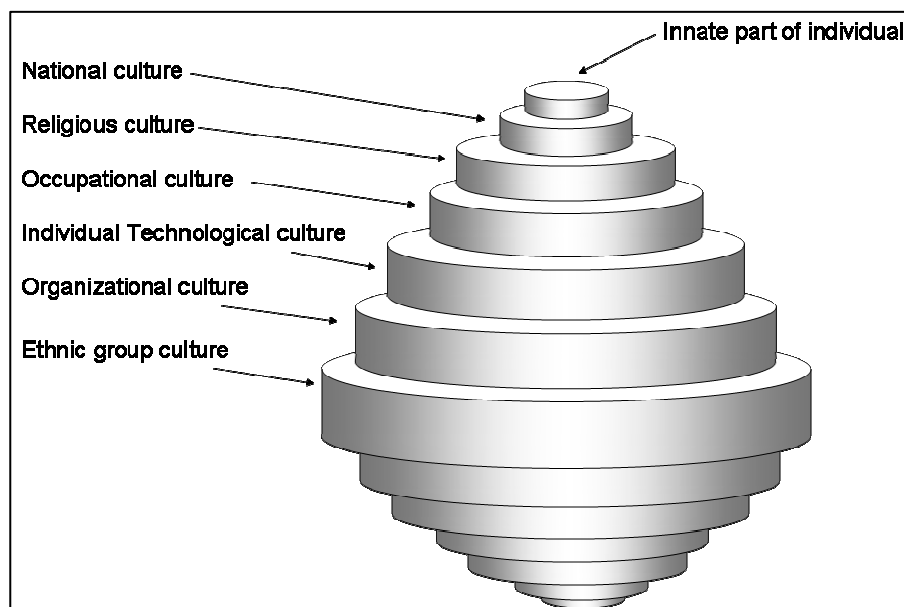

Figure 1. 'Spinning top' model of culture (adapted from Walsh and Kefi, 2008)

RESEARCH MODEL

The first research objective of this research-in-progress is to conduct an interpretive exploration of the collective values that IT professionals share. IT professionals will be defined as those people who work within the functional area of Information Technology within an organization or as an IT consultant or otherwise fulfill an IT role. Consistent with a cultural sociological approach, the main areas of interest are: 1) shared values, 2) shared language, 3) shared history, and 4) shared context. A figure showing the relationships between constructs is shown in Figure 2. The research questions for this study

include the following: *What are the core shared values of IT occupational culture? How have these particular shared values developed out of shared language, shared history, and shared context?*
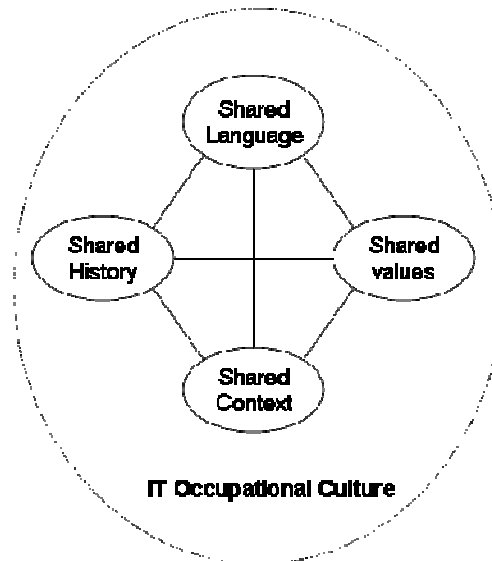

Figure 2. Proposed Research Model of IT Occupational Culture

Shared values

Values are the core element of any cultural group (Deal and Kennedy, 1982; Hofstede and Hofstede, 2005; Brief and Nord, 1990). Shared values are enduring beliefs "that a specific mode of conduct or end state of existence is personally or socially preferable to an opposite or converse mode of conduct or end state of existence" (Rokeach, 1973, p. 5). They are more stable in a culture than its practices (Hofstede and Hofstede, 2005). Shared values provide meaning and spur social action (Brief and Nord, 1990). Because cultural values do not arise out of a vacuum, it is necessary to do a deeper exploration of how these values have developed and been shaped over time by shared language, history, and context. IT professionals, like any occupational group, have their own unique shared values.

Shared language

Culture has many antecedents and includes shared history and shared language (Schein, 1985). Shared language is the means by which culture is transmitted from one generation to the next (Halbwachs, 1925; Ferrante, 2003). Language can incorporate elements of sacred and profane values (Durkheim, 1982; Alexander, 2003). Language generates meaning (Brief and Nord, 1990) so to understand language is to help understand meaning. Shared language can convey information above and beyond the denotation of the actual words because words mirror cultural values (Ferrante, 2003). Commonly-used expressions can identify the unique preoccupations of a cultural group (Ferrante, 2003). IT professionals have their own shared language(s). Database analysts speak in SQL queries, network engineers speak in TCP/IP and three-letter acronyms. Project managers speak in terms of SDLC phases (Software Development Life Cycle). This esoteric language can impede communication with other groups outside of the subculture (Trice, 1993; Nord et al., 2007; Guzman, 2006) while simultaneously reinforcing a sense of shared culture within the occupational group.

Shared history

Culture is "an historically transmitted pattern of meanings embodied in symbols" (Geertz, 1973, p.89) and the culmination of all the shared assumptions a group has learned through its own history (Schein, 1999). Work values, in particular, are transmitted through historical processes and any study of work values must address the influence of shared history (Brief and Nord, 1990). Ignoring shared history can lead to a lack of understanding of ultimate outcomes (Brief and Nord, 1990). Interpretations of the meaning of any work activity are driven by our interpretations of the past (Brief and Nord, 1990; Allan, 1986; Halbwachs, 1925). Relevant past events in shared history can include social and economic events and institutions (Brief and Nord, 1990; Daynes, 2010). There are historical events that IT professionals share in their collective memory and a brief sketch of the history of the IT occupation will bear this out in the full study. Some of these significant events include

telecommunications deregulation, Y2K, the dot-com boom and bust, the recession, 9/11, offshore outsourcing, Sarbanes-Oxley regulation, and more. While some of the interpretations of these events may differ between individuals, many of their meanings are similar for the IT profession. The role of IT professionals has changed over time. Initially, IT served primarily in a back office or support role capacity but today plays a more strategic function within organizations (Chan and Reich, 2007). The cohesiveness of the IT occupation has also changed over time from a weak occupational group (Duliba and Baroudi, 1991) to one with a strong sense of identity (Guzman, 2006).

Shared context

Trice's (1993) Theory of Occupational Culture identifies the core characteristics of an occupational (sub)culture as esoteric knowledge, extreme or unusual demands, consciousness of kind, pervasiveness, favorable self-image, primary reference group, and abundance of cultural forms. These have been used previously to describe the cultural characteristics of the IT occupation (Guzman et al., 2004; Guzman and Stanton, 2004; Guzman et al. 2006; Ramachandran and Rao, 2007) but are missing the contextual link with shared values which this study will provide. For Geertz (1983), contextualization is the primary goal when analyzing cultural groups. IT professionals share a context of similar job functions as well as technical expertise. IT professionals frequently need to be on-call 24/7 in case of system down-time in ways that other groups do not. Stress, burnout, and turnover are common within the IT profession (Joseph et al., 2007). This sets them apart from other occupational groups within an organization. By examining the relationships between shared values, shared language, shared history, and shared context, a meaningful interpretation of IT culture that is consistent with the approach of cultural sociology can be achieved. Trice's seven characteristics are included in the construct of shared context.

METHODOLOGY

The methodology will examine both objective structures and subjective interpretation of meaning in the tradition of cultural sociology. Durkheim's sacred and profane elements and Weber's deeper meanings of work within the context of Alexander's 'strong program' of cultural sociology will be analyzed and interpreted. Data collection will be through interviews with IT professionals to explore the values that are important to them collectively. Schein (1999) emphasizes that interviews are the best means for collecting cultural information about values. The interactive process of interviewing is important because it can generate new knowledge by collecting and interpreting the informants' perceptions of the world (Kvale, 1996). Interviews create 'deep understanding' of people's experiences (Albrechtsen, 2007). The interviewees for the semi-structured interviews were selected using purposeful sampling in order to obtain a broad range of demographics (LeCompte and Schensul, 1999). These demographics included variations in age, gender, years of experience, industry, and type of IT role.

Where Guzman (2006) looked at perceptions of IT occupational culture by new people entering the field, we address the context of those who have been in the profession for at least 7 years (enough time to be fully socialized in the occupational culture). Participants are being obtained through professional contacts and professional organizations. The three selection criteria for interview candidates are 1) IT professionals who have worked in the field at least 7 years, 2) they have worked in multiple organizations in IT departments, not one company for their entire career, and 3) they are not members of IT management. It has previously been found that IT managers tend to share more in common with business management culture and overall organizational culture than with IT culture (Guzman et al., 2004; Iivari and Huisman, 2007). Where Patten et al. (2009) used a similar ethnographic interviewing method to examine the culture of the enterprise IT organization from the CIO's perspective, this study examines IT occupational culture from the employee's perspective. But similar to Patten et al. (2009), this research is from an "emic" perspective, where the interpretations are made from an insider's orientation (Bryne, 2001) because the lead researcher has previously been an IT professional for 18 years. Acknowledging the emic relationship of interviewer to interviewee helps to address the Principle of Interaction Between Researchers and Subjects as a best practice of interpretive research (Klein and Myers, 1999).

Seven interviews have been conducted so far with a goal of approximately 25 interviews or until data saturation is achieved and no new information is forthcoming from additional interviews. Creswell (2007) gives the guideline of 20 to 30 interviews as typical for qualitative research. Each interview typically lasts one to two hours. The interviews are tape recorded and then immediately transcribed. Nuances and tonal inflections are captured in the transcription in order to emphasize important issues. All the transcriptions so far have been supplied to the interviewees for validation that the right information was captured and were allowed to make any corrections or amendments. 100+ pages of interview transcripts have been documented thus far.

Analysis of ethnographic interviews means sorting out the structures of significance or codes and interpreting their meaning for a wider audience (Geertz, 2002). Therefore, the analysis of the interview data will involve several steps including coding, content analysis, and hermeneutic interpretation. Coding is the process of transforming raw data into a quantitative form

(Babbie, 1992). After the interviews are transcribed, they are imported into NVIVO for ease of coding. The first round of coding is open and will tag important ideas with keywords such as "bureaucracy" or "uncertainty" or "creativity". Coding also includes instances where the interviewee got particularly excited or upset or their body language changed (Rubin & Rubin, 1995). The codes are then grouped into categories. Coding categories may be developed based on theoretically determined categories (Brewerton & Millward, 2001). The a prior categories will include the constructs of interest in the research model, i.e., shared language, shared history, shared context, and shared values.

Content analysis refers to techniques for making inferences from text based on patterns (Bernard, 1995). NVIVO will be utilized to create a content dictionary that breaks down the categories by their associated codes. Two researchers will take the codebook generated by the main researcher and review all (or a sample of) the uncoded transcripts in NVIVO and re-code the data according the codebook. The results of the three sets of codings will be reviewed and discussed together to examine and resolve any discrepancies. Inter-rater reliability will be calculated (Cohen's kappa) to see how close the codings are. This will serve to reduce bias on the part of the main researcher (Brewerton & Millward, 2001).

A second form of content analysis is word frequency count. When conducting qualitative analysis, the frequency of a symbol, idea, or subject matter can be interpreted as measuring its importance, attention, or emphasis (Krippendorff, 2004). NVIVO can do this function across all the imported transcripts. Showing the numeric frequency of codes appearing in interviews is a way of showing the relative importance of the variables of interest (Guzman et al., 2004; Brewerton & Millward, 2001). This will be reported in tabular format as evidence of important recurring themes.

The results of the coding and content analysis will be used to create an overall interpretation. The approach is hermeneutical in that the interview transcripts are texts that are being analyzed. The approach of cultural sociology will be used to unpack the meaning of IT work. 'Thick description' examples from the interviews will be used to illustrate the meaning of each value dimension and how shared values have developed either through shared language, history, or context or all three.

Creating a hermeneutic interpretation is a subjective process but it should be more than simply the main researcher's opinion. One way to add reliability to the interpretation is to have additional researchers review the interpretation, after reviewing the transcripts, and provide feedback on how consistent the interpretation is with the data. Another way to validate the interpretation is to return to the interviewees and get their feedback on the overall interpretation (Brewerton & Millward, 2001). Klein & Myers' (1999) principles for conducting interpretive IS research will also be used as a template for evaluating the legitimacy of the interpretation. These include the principles of the hermeneutic circle, contextualization, interaction between the researcher and subjects, abstraction and generalization, dialogical reasoning, multiple interpretations, and suspicion (Klein & Myers, 1999).

INITIAL RESULTS

Initial interviews have already found some common cultural patterns, but additional data and analysis are needed. A more complete cultural portrait with thick description will be presented at the conference after more interviews have been conducted this summer. Some preliminary value themes based on initial interviews, as well as a strong backing in theoretical literature, include the following broad areas.

Structure of Power: Power should be distributed throughout an organization versus being centralized

Control: Formal, structured control processes should be followed.

Open Communication: One should communicate well with other groups outside of IT.

Risk: One should be comfortable taking risks in order to innovate.

Reverence for Knowledge: Distinctions between members should be made on the basis of technical knowledge

Enjoyment: Work should have certain play-like aspects like fun, creativity, and challenge.

The results of this research-in-progress will not be generalized facts, but deeper understanding of the context of the IT occupation and how it is changing. A recurring motif of shared language is one of cowboys who were used to a Wild West environment in the 1990s and now have to find meaning within an environment of increasing control, centralized power, more bureaucracy, and less freedom. Reverence for technical knowledge and enjoyable challenge may represent an 'eruption of the sacred' while bureaucracy represents the eschewed profane (similar to Weber's 'iron cage'). Even though IT cowboy culture has evolved and matured since the boom of the 1990s (shared history), there is still underlying friction with business users due to differences in meaningful shared values. These issues are not part of any one organizational culture but rather reflect cultural trends across the occupation transcending organizational boundaries. The next steps for this research-in-

progress include gathering additional data, validating the interpretation of value themes with a team of researchers, and interpreting those value themes through the lenses of shared language, shared history, and shared context. This study is part of a larger research agenda which will ultimately examine the impact of IT occupational culture on organizational outcomes.

CONTRIBUTIONS TO KNOWLEDGE

Kaarst-Brown and Robey (1999) suggest that understanding IT culture better will assist managers in recognizing the difficulties of implementing change in the organization, something that firms still wrestle with today. A better understanding of IT occupational culture will have the practical value of 1) facilitating smoother interactions between IT and business (and other departments within an organization), 2) helping managers better understand resistance to change within the organization and 3) leading to better understandings of the cultural determinants of IT success. Contributions to theory include filling a gap in knowledge of IT occupational culture with deeper understanding and a research model strongly rooted in cultural sociology. Generalizability is limited, at this point, to a U.S. population of IT professionals. IT occupational values may change in the context of different national cultures (Guzman et al., 2007).

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