Abstract

This is a proposal to gather data on blogging practices and policies in firms. Concurrently with collection of public financial data, the study would, at least at one point in time, collect attitudinal, perceptual, and communication interaction data to test relationships between blogging and organizational climate, trust including individual propensity to trust and trusting environments, and communication behaviors.
Table of Contents

List of Tables

List of Figures

Chapter 1. Introduction
   Overview of research question, research objectives

Chapter 2. Literature Review
   A. Blog Research
   B. Organizational Climate Theory
   C. Trust Theory
   D. Modes of Interaction
      1. Group Theory including Field Theory
      2. Interaction in groups
      3. Media Theory

Chapter 3: Research Hypotheses
   Research Model
   Review of Key Concepts
   Operationalizing the concepts

Chapter 4: Research Methodology
   Population to be Sampled; Respondents, interviews, surveys
   Collection,
   Data analysis

Chapter 5: Research Findings

Chapter 6 Discussion of Results
   Possible Contributions

Appendices
   Schedule
   Budget
   Interview protocols
   Candidate Survey Items & Previously-Validated Scales

References
Chapter 1: Introduction

While the pace of business activity has been accelerated and globalized by communication technology, new social technologies provide new forms of social and intellectual collaboration support. In particular, blogs and wikis are easy-to-use tools for structuring both knowledge and relationships. They interact with the personalities of the contributors and are seen as a way to nurture productive social behavior.

Blogs have spread in cyberspace like a generally positive pandemic. Individuals and groups share their thoughts, musings, pictures, new ideas, and more. Business publications talked as if blogs were the biggest development after the Internet itself. Businesses had better start paying attention to blogs, according to a Business Week’s cover story (BusinessWeek 2005). The theme was that customers are blogging about your firm and your competitors so you neglect blogs at your own peril. Other business publications give similar advice. Blogs serve journalism and politics actively, but in roles different than those inside firms.

The essential features of both blog and wiki posting systems are ease of use and linking – building social networks. Users do not need to know html. The blog is a reverse chronological posting system. Each new posting goes on the front of the blog pushing the previous content down. Previous content cannot be changed except by the owner. Links recommended by the host to other sites are usually in sidebars, as well as in the text.

In contrast, wikis encourage commentary, editing, and structuring of previous entries up to and including deletion. Software facilitates rollback by the owner as required in the case of inappropriate content or deletion. Thus the wiki may be more appropriate for building documentation or organizing new knowledge. The archetype is Wikipedia.¹

Evolving commercial software products blur the distinctions between blogs, wiki’s and other online communities by combining features. Basic systems are free services on the Internet. Share-ware, open source software is also available. Moderate cost hosting services provide more polished presentations, control and freedom from ads. Many systems provide for Really Simple Syndication (RSS) or ATOM feeds thus eliminating the need to periodically check a blog

¹ www.wikipedia.org
to keep up to date. Companies such as Technorati and Google provide indexing and searching of the millions of blogs. The blogs and wikis are touted (including by this researcher) as alternatives to floods of email.

Blogs and wikis are exploding facilities on the Internet for both personal and corporate use in posting and sharing information (Dearstyne 2005). Since the early years of the 2000 decade, they were characterized as an important innovation, increasingly often discussed in newspapers and business magazines. In May of 2006, Jackson and colleagues found over 1000 articles in popular media (2007). They are a supplement to traditional news media uncovering facts and stories overlooked (Dearstyne 2005). Blood (2004) considered blogs as arguably a new medium, “participatory media.” It is plausible to go further than Blood and claim that the medium is the message in McLuhan fashion. The essential elements are overwhelmingly social, facilitated by technical innovation.

Susan C. Herring, Lois Ann Scheidt, Elijah Wright and Sabrina Bonus (2005) disagree that blogs are a fundamentally new or revolutionary form of communication. They describe blogs as a “bridging genre” between static HTML pages and asynchronous computer-mediated communications as represented by newsgroups.

Blogs appear to build both the socio-cultural and knowledge management (KM) resources of organizations. (Knowledge-focused blogs are also called k-logs.) Both culture and some knowledge are hard to duplicate and thus are drivers of competitive advantage. Being both useful and easy to use, they help transform work into play.

In this research I focus on the use of blogs and k-logs, while asking about wikis, for organizational purposes. Moreover, companies that encourage blogging often (to what extent is an empirical question) encourage personal postings too. Estimating the extent of participation in both internal and customer-facing blogs is a survey goal of this research. Already some firms apparently believe that blogs are easy to use and benefit the organization. Are there predictors or important consequences of such a belief? Contributing to a blog in a business setting has both cognitive and social functions. In the cognitive domain, the blog is a means of structuring information, making connections, and preventing cognitive overload. Contributing to a blog is an act of sharing and trusting which are social functions. Previous research concerning other collaboration technologies suggests that trust is an essential factor in use (Jarvenpaa and Leidner 1999).
Dearstyne (2005) distinguished five classes of blogs. They are

1. Individual personal news and views. These are journals often to share views, experiences, photos, etc. with family, friends and associates.
2. News, commentary and journalism. Blogs are considered by many as legitimate news media.
3. Advertising, promotion, customer service and customer feedback. Tapping into customer views is a source of ideas and a way of building loyalty.
4. Business and professional insight. Dearstyne (2005) claimed these are the most influential business blogs, some being run by CEOs.
5. Internal information sharing and knowledge management (KM). Blogs are easily implemented on intranets most often inside the firewall. Variants may permit selective external access to key partners.

A more general classification according to Herring, et al. (2005) would be to follow a scheme attributed to Krishnamurthy that classified blogs into categories created by quadrants on dimensions of individual to community, and personal to topical. Quadrant I was labeled online diaries (personal, individual); quadrant II was support group (personal, community); quadrant III was enhanced column – also called filter – (individual, topical); and quadrant IV was collaborative content creation, e.g. meta filter (community, topical).

Proponents say that blogs can help organizations change and adapt. Many believe that the social dimension of blogging is the most important contribution. As one business consultant stated:

“Much of the value of a blog network is the social capital that is built from relationships. People read each others' blogs to see what their friends (and enemies) are up to, and then they add value by linking, commenting and elaborating what is being said. The implicit or explicit "swarmth" [online reputation] that individuals accumulate can be a vital indicator of their worth to the organization — who trusts whose recommendations, whose proposals seem to garner the most attention and who is a respected authority — which can be more effectively managed (if managed is the right word) in the social matrix than in the command-and-control hierarchies that still seem to form the architecture of most businesses. Non-social solutions — such as traditional
content management solutions, portals and newsletters — cannot compensate for the missing social dimension that social tools engender.” (Cutter 2004)

Groups and teams are well-studied in the social science literature because of their importance in work and because they are easily assembled in the lab. The purposes and compositions of groups vary widely. Despite the huge volume of studies, groups and meetings continue to be a subject of study due to the time and resources all enterprises invest in them. Group participation is, after all, the fundamental human activity, the pace and character of which has been accelerated and altered by the Internet. Ad hoc teams, often coordinated only remotely via communication systems and media, are critical to many modern, adaptive organizations (Jarvenpaa, Shaw et al. 2004).

What is it about blogging that should interest us as social scientists? These days groups increasingly gather more for the construction and sharing of knowledge rather than for the efficient production of physical goods. Necessarily social processes build intellectual capital to be used for competitive advantage. The study of these social processes goes on in many research streams.

In terms of knowledge management, the firm can build its intellectual resources if members trust the company enough, i.e. feel secure enough in their positions, to explicitly contribute knowledge, or on the other hand to admit to desires and needs to fill in gaps in knowledge. In the social realm, self-disclosure about oneself such as family and hobbies, often builds useful familiarity and approachability. Companies can create effective expressions of desirable values such as openness to suggestions by allowing blogging using company resources, be they time and/or the information technology to support blogging.

With all the attention to and alleged potential of blogs in business for social and knowledge management purposes, the proposed research raises compound research questions: What are organizations actually doing with blogs, and why, as both social and knowledge management tools? How do blogs contribute to building trust in organizations?

Research Objectives:

The proposed research would have two main objectives: First to collect descriptive data on the extent of corporate blogging in a random sample of publicly-traded firms. The second, is
to test claims for beneficial social purposes, particularly trust-building blogs in organizations. Compared to publicly-accessible blogs, relatively little has been published about internal corporate blogs, either sponsored, or condoned. As a phenomenon being rapidly tested and adopted, there is an opportunity to gather basic facts about blogging, and test theories of communication, trust, and organizational climate.

**Descriptive Objectives**

The first objective is to document organizations’ blogging policies and how they relate to stated goals and objectives. I will assess the processes and configurations that produce or are perceived to produce positive results. Furthermore, I will gather data on whether firms attach special importance to blogs because of the need for virtual teams, collaboration with remote partners, network organizations, and other modes of operation driven by the Internet and globalization. Systematic data will be collected in a stratified random sample of publicly-traded firms on

- the forms (blog, k-log or wiki or all),
- organizational purposes (e.g. specific task, evaluation and social forums),
- values concerning contribution,
- allowed contributors (internal, external customers and/or partners, both),
- formal and informal policies, both pro and contra blogging
- perceived value, and
- future plans.

I will assess perceptions of changes in the character of debate and discourse within the organization attributed to, or coincident with, blog activity. For example, can changes in communication patterns and sociality be documented?

This part of the research would perform the scientific function of documenting “what is” in the world and classifying the findings in useful ways.

Although the use of blogs was widely reported in the business press, many organizations and firms had yet to adopt in 2004, according to Cayzer (2004). More recently at the end of 2006, an Edelman employee communication survey found that nearly one-third of “senior
communicators” in a convenience sample of companies and clients reported that their organizations hosted, authored or supported a blog for internal communication (Edelman 2006). The response rate was 14%, resulting in 111 completed surveys of which 75 came from Fortune 500 companies.

Explanatory Objectives

The business role of trust in the use of blogs as information-sharing and communication tools has not been fully explored. There is a need to critically evaluate the highly-touted claims of knowledge-related benefits (and costs) of these alleged powerful social, collaborative tools.

The second objective is to assess if and how blogs, k-logs, and wikis are believed to contribute to, or are fostered by, an organizational climate encouraging sociality, knowledge sharing, and knowledge creation. I will examine the power (or lack thereof) blogs & k-logs to build organizational climates, relationships, and connections.

The third objective is to explore the specific role of blogs in building trust, trust in fellow employees in the immediate department, and the organization management. There may be opportunities to explore the virtuous cycle hypothesis about trust building more trust (Sutanto, Phang et al. 2005). The overall hypothesis is that the ease of use and the structure of blogs encourage social behaviors that facilitate collaboration and employee satisfaction in firms.

I suggest that in addition to thinking about classes and genres of blogs, the blog phenomenon within firms can be better understood from the perspective of building social and intellectual capital consistent with the theory of Nahapiet and Ghoshal (1998). That is because the blog provides structure with network ties, cognitive support, and most importantly, relational support.
Chapter 2. Literature Review

Applicable Literature and Theories

Several significant sources of theory are applicable to blogs. As a social phenomenon they can be analyzed on many levels, from the psychology of the individual blogger up to broad societal trends. This literature review starts with some important characteristics of blogs themselves. The discussion then shifts to organizational climate, an hypothesized reflexive enabler of blogging in organizations. Next, trust theory is reviewed in some detail because it is a significant part of organizational climate, theories of organizational communication, and models of employee commitment. Trust is a multi-dimensional concept and careful distinctions between levels of analysis must be made. Group theory is applicable because people generally work in groups rather than the firm at large. Blogs have potential in many aspects of group work. Examples include seeking assistance, group support, vetting ideas, and monitoring of developments in the firm and industry. Employees’ experiences of organizational climate at the group level have been well-studied in the social science literature. The discussion winds up with discourse and media theory, which shed some light on how blogs might change dialogues.

A. Blog Studies

There are many newspaper and magazine articles about blogs and blogging. The academic literature is just catching up due to the traditional lags in journal publication. Despite the millions of blogs, Herring, et al. (2005) suggest that the blog is neither fundamentally new nor unique. They place the blog as a new genre in the “ecology of the Internet.” This genre shares features with and between both media-rich web pages and the text-oriented computer-mediated communication systems in terms of frequency of updating, multi-media capability, and symmetry of exchange. Blogs can also be classified on the dimensions of personal vs. topical and individual vs. community. ((Herring, Scheidt et al. 2004), crediting Krishnamurthy.)

In their 2003 random sample of 203 blogs, Herring, et al. (2004) found that the personal journal type blog was the dominant type with over 70% of the sample. The filter type was second with 12.6%. The filter type is one which primarily links to, and comments on, other sites.
<table>
<thead>
<tr>
<th>Type</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal journal</td>
<td>140</td>
<td>70.4</td>
</tr>
<tr>
<td>Filter</td>
<td>25</td>
<td>12.6</td>
</tr>
<tr>
<td>K-log</td>
<td>6</td>
<td>3.0</td>
</tr>
<tr>
<td>Mixed</td>
<td>19</td>
<td>9.5</td>
</tr>
<tr>
<td>Other</td>
<td>9</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td>199</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Herring, et al. (2004, 6)

Overall, Herring, et al. (2004, 2005) said that the popular impression of large-scale linking between blogs is unjustified. However they concede that ease of use and the interactive character of blogs, what they saw as an incremental change has the potential to reshape the “genre ecology of the Internet.”

Blogs external to the firm are important for customer involvement and public relations, this research will focus mainly on internal blogs, both the social blogs, the knowledge-management blogs or k-logs (Herring, et al. 2004) and ones which mix the functions. Whether or not there is a strict separation of types of blogs behind or across corporate firewalls remains to be investigated by this research. There may be a high correlation between blogging at home and blogging at work.

While internal corporate blogs may or may not be more likely to be project-centered k-logs, there is a fundamental difference compared to typical public personal blogs. It is that contributors are likely to have had some history, or prospect of interaction with each other on a company project. Even though contributors may never have worked together, they may recognize that they might work together in the future.

Another application of blogs is as highly adaptable replacements for older, dedicated, and expensive group support systems (GSS). The present-day communication and computation contexts are quite different than when GSS’s were introduced. The data compression technologies, software, and cheap bandwidth generally and over the Internet specifically have made video conferencing widely available. The appropriate GSS model now would be to post information to a blog, vet the issues, then meet (whether virtual or face to face (FTF)) to make decisions, and finally to use the blog to facilitate implementation. Another factor has been the
growth of globally distributed work with human knowledge resources more important than physical ones.

Wright listed his ‘top eight ways’ blogs can be used internally as:

- “Project management communication
- Internal communication and marketing
- Idea generation and vetting
- Employee involvement and connection
- Team and project communication with the entire organization
- Internal team and project communication
- Administrative communication
- Dynamic team creation” (Wright 2006)

I would add enjoyment of work to the list above. The central task of this research is to test the application of trust and organizational climate theories to practical lists such as Wright’s.

The favorable discussion of blogging above should not imply that the author is unaware of negative aspects of blogging. Criticism of employers by employees can be constructive or malicious. A recent article entitled “Blogging: The New Computer "Virus" for Employers” outlines a number of the problems and difficulties in dealing with hostile blogs by disgruntled employees and others (Brody and Wheelin 2005). Flynn (2006) recently published a whole book primarily giving advice on avoiding legal trouble caused by blogs.

The proportions of business and social communication in blogs is a significant issue. Social Intelligence Design (SID) (Azechi 2005) would structure the interactions, perhaps assisted by software agents, to create affordances to promote both positive identities, knowledge sharing and knowledge creation.

In an important recent study at “Mega” corporation Jackson, et al. (2007) found that those people interviewed or surveyed reported important informational, social and other benefits from blogging. Mega has 20,000 employees registered at the corporate blog site. Of the 17% of employees that had blogs, only 3% were active. Heavy and medium users’ actual social and
informational benefits exceeded their expectations. Informational, social and other benefits were report as shown in the table below.

### Types of Reported Benefits from Blogging

<table>
<thead>
<tr>
<th>Informational</th>
<th>Social</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Getting/sharing information</td>
<td>Engaging in dialogue</td>
<td>Managing upwards</td>
</tr>
<tr>
<td>Journaling</td>
<td>Communicating</td>
<td>Working efficiently</td>
</tr>
<tr>
<td>Problem solving</td>
<td>Collaborating</td>
<td>Replacing technology</td>
</tr>
<tr>
<td>Getting/giving feedback</td>
<td>Networking</td>
<td></td>
</tr>
</tbody>
</table>

Building community  
Gaining company pulse  
Gaining perspective  
Developing Reputation  
Self expression  
Building Career  

Table 2- Adapted from: (Jackson, Yates et al. 2007, 5, Table 1)

Social networking and ‘building community’ benefits were reported by all levels of users. Blogging also lead to contacts outside the system, e.g by telephone, more so for heavy users. They found support for the “kindness of strangers” reported in the classic article by Constant, Sproull and Kiesler (1996). In that study, more ties with organizationally lower-level people, or technical people contributed significantly to getting problems solved via broadcast email.

Keeping track of developments, the going’s-on, etc of the firm via blogs were also noted by Jackson, et al. This view is consistent with the view of the organization as the result of sense making by employees via numerous enactment-selection-retention sequences (Weick 1979).

### B. Organizational Climate Theory

Organizational climate is employees’ perception of company policies and social environment (Patterson, Warr et al. 2004). It is a reflection of how employees feel they are treated by the organization (Harris 2002). Organizational culture is, in contrast, taken to be the high level, foundational values of the organization. Culture and climate will not match if, for example, one department does not faithfully translate the company culture into the reality of everyday interaction. Measurements of climate tap into the values and processes as experienced by employees. Organizational culture, particularly a knowledge-centered culture, and
organizational climate are often valuable resources for firms (e.g. Janz and Prasarnphanich 2003). Studies discussed below are motivated by understanding the conditions that promote knowledge sharing as parts of strategies of knowledge management (KM).

Patterson, Warr et al. (2004) found eight (out of 17) statistically significant (after controlling for job satisfaction) dimensions of company culture that predicted productivity in the following year, controlling for previous productivity, company size and industrial sector. The eight aspects were supervisory support, concern for employee welfare, skill development, effort, innovation and flexibility, quality, performance feedback and formalization. Some components of climate thought to be important were not significant, for examples involvement and integration. Another significant finding was that job satisfaction was highly correlated with positive elements of organizational climate suggesting that employees make some overall, global summary assessment of the company values as they experience them in daily work. The study explicitly concerned economic productivity but noted that other research had studied climate as predictors of technological innovation, gain in market share, and effects on customers. Organizational climate is a big factor in the winners of “best companies to work for” surveys but money is not (Harris 2002).

As comprehensive and valid as the Patterson, West et al. (2005) climate survey was, it did not cover certain concepts directly related to blogging. Communication climate – defensive vs. supportive (Harris 2002) – is an important element of climate only tangentially addressed by Patterson, West et al. (2005). Other concepts under studied by Patterson, et al. were trust and tolerance of risk. (Organizational climate is related to the topic of the “spirit” of technology in relation to adaptive structuration theory in groups discussed below.)

Teams with involved leaders or coordinators, rewards for sharing, training for teamwork, and social events were associated with higher levels of active empathy, lenience in judgment, mutual trust, courage to express opinions and access to help. A study looked at 363 members of 12 teams in medium to large Spanish firms. The constructs listed accounted for significant variance but the total variance accounted for was only 20% (Zárraga and Bonache 2003).

Similarly, Janz & Prasarnphanich (2003) examined 27 software development teams involving 231 IS professionals in 13 firms. Positive associations for climate variables were found for support of risk-taking, rewards for achievement, warmth, and general supportive environment. Organizational climate plus group autonomy were associated with a group
learning concept which in turn was linked to positive evaluations by stakeholders (an independent measure) and work satisfaction.

In their study of information professionals Janz and Prasarnphanich found that a climate including risk acceptance, reward, warmth, and support, coupled with autonomy (an expression of trust) was positively associated with work satisfaction and work performance through a mediating variable, cooperative leaning. They asserted that “... the flow of knowledge is based on trust in both the organization as a whole and the specific individuals with whom we interact.” (Janz and Prasarnphanich 2003, 351). Their model with my hypothesized role for blogging as knowledge sharing is shown in the figure below.

**Climate as Antecedents of Effective KM**

![Climate Model Diagram](image)

Adapted from Janz & Prasarnphanich (2003)

Another recent, significant study concerns the role of organizational climate and intentions to share knowledge. In their study in Korea, Bock, Zmud, Kim, & Lee (2005) found that organizational climate conditions of fairness, affiliation, and innovativeness were positively associated with a subjective norm favoring knowledge sharing and intention to share knowledge, both implicit and explicit. Note the positive contribution of affiliation, a social identity construct. Their theoretical base was the theory of reasoned action (TRA) (Ajzen and Fishbein...
1980) a progenitor of the widely-employed technology acceptance model (TAM) (Davis 1989). Other positive factors were a sense of self-worth and anticipated reciprocal relationships. Anticipated extrinsic rewards were negatively, but not significantly, related to an attitude of knowledge sharing.

Fairness, affiliation and innovativeness in the organizational climate were positively associated with norms of knowledge sharing and intention to share knowledge. Anticipated reciprocal relationships were not significant, to the surprise of the authors (Bock, Zmud et al. 2005). Their model is shown below with my anticipation of a possible role of blogging.

Knowledge creation is an on-going process rather than something that is primarily event driven. Lee & Choi (2003) examined perceptions in 147 Korean firms by surveying 1425 managers concerning knowledge creation processes. Those processes included socialization, externalization, combination and intermediation. The enabler concepts – organizational climate in the purview of this proposal – statistically significant in the aggregate but not individually, were collaboration, trust, learning, and centralization.
Lee & Choi (2003) developed a research model with seven enablers: collaboration, trust, learning, centralization, formalization, T-shaped skills, and information technology support. They believed that knowledge creation processes such as socialization, externalization, and idea combination are essential to firms. Organizational creativity was a key dependent variable incorporated into their model. Surveys collected from 58 firms were analyzed to test the model. Their results confirmed the impact of trust on knowledge creation. Blogging would fit into their model as illustrated below.

![Climate as Enabler of KM](Climate as Enabler of KM)

Organizational climate is defined in several ways as noted above. That body of research provided a number of plausible alternatives for measurement scales. Specific choices are discussed below.

Many firms try to structure their organizational climates by their HR practices. For example Collins and Smith “... found that commitment-based HR practices were indirectly related to firm performance through their effects on organizational social climate and knowledge exchange and combination.” (Collins and Smith 2006, 554)
The values implied by commitment-based HR create trust in employees. The particular strength of the Collins & Smith (2006) empirical research is that it tested, and found support for, the theory of social capital formulated by Nahapiet & Ghoshal (1998). They proposed that social capital has structural, cognitive, and (especially) relational dimensions. They also asserted that effective organizations will balance intellectual and social capital. My research is essentially testing the idea that blogging can contribute to the formation of social and intellectual capital.

From the above discussion, the proposed research can reasonably predict that blogs contribute to a positive organizational climate. However it appears that climate is a necessary but not sufficient condition. The necessary condition is trust, the subject of the next section.

The above discussion supports the claim that organizational climate directly affects productivity and knowledge sharing. Firms like to be enjoyable places to work. However, their primary goals are normally to be profitable in the process. In this era of declining importance of manufacturing, intellectual capital’s importance is increasing. New ideas are the new products. Better delivery of services and happy customers are also essential. Blogging by its nature is a communication process suited to discussion of ideas and inviting participation. Blogging may help firms mobilize their people and their ideas. The study of how organization take advantage of their intellectual resources is often called knowledge management (KM). KM also involves
capturing the tacit knowledge of experts. In this section I illustrated in a general way how blogging would fit into recent studies of organizational climate and KM or knowledge sharing.

Obviously blogging is not a necessary or sufficient condition for effective knowledge management. Blogging could be one more communication tool in helping organizations and teams communicate effectively. In the next chapter I propose to test the claim that blogs positively affect organizational climate and knowledge sharing.
C. Trust Theory

Open virtually any popular business magazine, whether general or specific to C-level executives and you will find trust discussed. Trust is clearly important to dealings internally and externally to the firm. We read about trusting employees, building trust with departments or executives and suppliers. We must not forget customers. Everybody knows what trust is but when it comes to research, the investigator quickly discovers that there is a deep structure to trust.

Trust has many definitions. Fukuyama (1995) considered trust, a form of social capital, to be more important than physical or financial capital and defined it as “... the expectation that arises within a community of regular, honest and cooperative behavior based on commonly shared norms on the part of members of the community” (26). Mayer, Davis & Schoorman remind us that trust involves at least one of the parties accepting exposure to risk (Mayer, Davis et al. 1995).

The complexity and importance of the trust concept were illustrated by the following study which noted both the trustworthiness of others (potential trustees) and trustor attitudes and behaviors. Employing interviews in 20 organizations (13 for profit, 7 non-profit), Abrams, Cross, Lesser & Levin (2003), summarized their findings and advice on successful knowledge-sharing networks this way.

“From our interviews, we learned that those who are seen as trustworthy sources of knowledge tend to: (1) act with discretion; (2) be consistent between word and deed; (3) ensure frequent and rich communication; (4) engage in collaborative communication; and (5) ensure that decisions are fair and transparent. Under organizational factors, we identified two ways to promote interpersonal trust: (6) establish and ensure shared vision and language; and (7) hold people accountable for trust. Under relational factors, there is some overlap with the trustworthy behaviors mentioned above, but we also identified two new behaviors: (8) create personal connections; and (9) give away something of value. Finally, under individual factors, a person’s own judgment of his or her abilities (self efficacy) also matters, a trust-promoting behavior identified in our interviews which we characterize as (10) disclose your expertise and limitations.” (Abrams, Cross et al. 2003, 65-66) [footnotes omitted].

This study of blogging proposes that trust is mediated by the technology and by the corporate environment. The close connection of trust and knowledge is illustrated by a relatively simple trust model in a telemedicine research project. Paul & McDaniel (2004) conceptualized
and looked for four kinds of interpersonal trust namely, calculative, competence, relational, and integrated. Trust is particularly important in medicine because of the risks to the patients and providers’ reputations.

Briefly, calculative or rational trust is trust based on ‘cost-benefit’ considerations, i.e. am I better off by collaborating? Competence trust is the evaluation that the collaborator has the knowledge and experience to provide good advice. Relational trust, also called benevolent trust or normative trust, is the feeling that the parties want to do help each other. Relational trust is based on personal goodwill. Finally, integrated trust is a general summation of the three previously-mentioned types of trust. See the model below.

**Interpersonal Trust**

<table>
<thead>
<tr>
<th>Self-Interest</th>
<th>Ability</th>
<th>Empathy</th>
<th>Integrated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

![Virtual Collaborative Relationship](image)

Figure 2-. Adapted from (Paul and McDaniel 2004, 187 Fig. 1)

They examined the association of interpersonal trust with virtual collaborative relationship (VCR) performance. Trust enabled collaboration as a means of complexity reduction, and virtual collaboration extended face-to-face collaborative relationships by substituting technology for collocation (Paul and McDaniel 2004). Their study consisted of 74 interviews in 3 health centers concerning 10 specific projects and thus 20 relationships 10 each way. (That is remote practitioners’ perceptions of the health center experts were gathered with health center experts’ perceptions of the remote practitioners.)

Through qualitative analysis of interview data, and by a complicated\(^2\) facet analysis, Paul & McDaniel (2004) found that the impact on remote site health care delivery of VCRs was monotonically associated with each of the individual types of trust and integrated trust.

\(^2\) They were forced to tease out explanatory classifications because of their small sample size.
Significantly, however, they discovered that without the competency trust, the overall trust was negative.

For future research Paul & McDaniel suggest, *inter alia*, determination of whether integrative trust is a new kind of trust or just a mixture of the other types of trust. Additionally, they recommended addressing how the different types of interpersonal trust interact and the temporal relationships between these types of trust.

In less life-critical settings employees often choose to seek advice from less competent but more likeable (and therefore trustworthy – more benevolent, less risky to self-esteem) colleagues (Casciaro and Lobo 2005). They conducted surveys of social networks and interviews in a Silicon Valley firm, an IT multinational, a U.S. university and a Spanish office of a global luxury goods manufacturer. They pointed out that sometimes facts alone are not sufficient to accomplish a task. Brainstorming and follow-up with a competent jerk might be difficult. They wrote, “... [I]n order to learn, you often have to reveal your vulnerabilities, which may be difficult with the competent jerk – especially if you are afraid of how this might affect your reputation in his eyes or in the eyes of others to whom he may reveal your limitations” (Casciaro and Lobo 2005, 95). These issues concern one individual trusting in another, risking being vulnerable.

Both individual and organizational forces are at work with trust concepts. Trust is treated in the literature as an environmental (sociological perspective) variable as in organizational climate, as a cognition about a trustee (social psychological perspective), and as an individual personality variable (psychological perspective) (Mayer, Davis et al. 1995, ; McKnight, Choudhury et al. 2002). The many types of trust may not be comparable from one piece of research to the next. Although Mayer, et al. (1995) entitled their article “An integrative model of organizational trust,” and convincingly sorted out the three levels of analysis, they limited their applicability claim to dyadic relationships as for example between a junior employee and mentor. (The model has since been extended to teams as discussed below.) Particularly appealing about the Mayer and colleagues model are the feedback loop and the perceived risk moderator shown in the figure below. It lacks the organizational climate construct hypothesized in this proposal.
Trust is a well-studied concept in social science. However many of the studies mix definitions and levels of analysis. Some have dubious reliability in my opinion – because of short scales, for example -- but are published. (Mandelli (2002), for one, has some very interesting observations about trust but her short scale addressed trust only indirectly). Early work has been replaced by much more solid research. Several types of trust have been distinguished. McKnight, et al. (2002) found 15 trust types in their literature review in preparation to build new scales. In addition to trust in collaboration methods, there is a great deal of research interest in trust and e-commerce because of e-commerce’s expanding share of business transactions. In this study, I concentrate on conceptualizations of trust more related to collaboration while taking advantage of refinements in the conceptualization and operationalization of trust fostered by e-commerce research.

McKnight & Chervany (2002) provided another of several influential, frequently-cited trust models bringing together the concepts of trust at different levels of analysis and built in large part on Mayer, Davis & Schoorman (1995). They explicitly extended the model for e-
commerce but the general principles apply. Below as Figure 3 I show how blogging could fit in the McKnight & Chervany theoretical framework. McKnight & Chervany recommended that their model be tested with trust related behaviors, i.e. go beyond the trusting intentions expressed in their experiment. Blogging could be the trusting behavior.

A subsequent article, McKnight, Choudhury & Kacmar (2002) presented the details of the validity of the concepts as found in an e-commerce experiment. At the individual level, disposition to trust included faith in humanity -- competence, benevolence, and integrity – as well as trusting stance and personal innovativeness.

At the institutional (sociological) level, the measures were related to the institutions of e-commerce and situational normality of benevolence, integrity and competence plus a general perception. For example, in the organization a question might be “I am comfortable relying on the company to meet its obligations.” There can also be structural assurances of safeguards.
Trusting beliefs (social psychological effects) in the context, economic factors, and institutions contribute to trusting intentions which the correlate with behaviors. Social-psychological factors work at the team level, a feature of many modern organizations (Edmondson 2004). Blogging policies whether written, or just part of the culture, are forms of structural or institution-based trust.

Trust involves the creation of interdependencies as well as vulnerabilities. In learning communities, Suthers (2005) asserted that their effectiveness is improved by deliberate exposure of weaknesses in order to move forward. He said that knowledge-building communities expand their boundaries by collectively, that is by social interaction, reflecting on the “limits of their understanding and choosing actions that address these limitations….” (Suthers 2005, 663). He called it “meaning-making.” This blogging research would test or elaborate on Suthers’ symbolic interactionist view of the process.

In other words, collaborators must trust each other enough to reveal weaknesses and make explicit the need and resources to improve conditions, e.g. knowledge sharing. The affordances of blogs and their asynchronous use could facilitate discussion of matters before they became urgent while raising questions without explicit impressions of ignorance. We must ask if there can be trust in a group – a sort of halo effect – beyond trust between individuals.

To address the question, Serva, Fuller & Mayer (2005) conducted a field experiment and demonstrated an effect for reciprocal trust among interacting teams. In doing so they extended the theoretical model of Mayer, Davis & Schoorman (1995) from dyads to teams. Senior undergraduate college business students took roles of software developers for one team and were the managers for a third team. They interacted over semester in a setting fairly comparable to a business setting. Serva, et al. also explicated the feedback loop shown by Mayer, et al. (1995) finding evidence for reciprocal trust. Their measures are good candidates for this study.

Trust thus involves both giving and receiving. Blogs often involve both. Some people share what they know while others ask for help. As noted above, organizational climate can promote sharing. The addition of trust constructs to organizational climate would an extension of the model and perhaps would prove to be parsimonious. An informative extension beyond intention to share knowledge would be actual behavior in contributing to blogs and replication in another culture. We must ask if there were some cultural or industry-specific dimensions that
would affect generalizability of a claim that blogs produce a gain in knowledge sharing. At Mega Corporation the most active bloggers posted much more frequently on sites other than their own (Jackson, Yates et al. 2007).

Wasko and Faraj (2005) applied theories of collective action and social capital to study knowledge contribution in electronic networks of practice. They evaluated the frequency and helpfulness of postings. The significant constructs predicting knowledge contribution were reputation (perceived enhancement of), centrality (dense strong ties) and tenure in the field (a law specialty). Non-significant constructs were enjoyment of helping, self-rated expertise, commitment (to the network) and, to the authors’ surprise, reciprocity norms. Trust was not studied. Their findings do not contradict aspirations for blogs because the inter-organizational context and technical focus minimized the social aspects. It appears that trust is less important when working relationships are well-structured (Jarvenpaa, Shaw et al. 2004).

Experiments have also shown that trust can be increased before and during an online series of tasks by the exchange of personal information, and by specific behaviors. Jarvenpaa & Leidner (1999) provided one of the first and most frequently cited studies of trust-building in virtual teams. Teams of globally dispersed students worked on projects and were compared on level of trust initially and at the end of the project. The researchers examined communication and relationship behaviors that seemed to distinguish the groups early and later in the projects. Positive associations with trust were found early for social communication and enthusiastic communication. In addition, the groups with high initial trust tended to cope well with uncertainty and show individual initiative. Later in the projects, substantial, frequent and predictable communication was associated higher levels of trust. On the relationship side, high trust was associated with transition to focusing on the work, positive leadership, and “phlegmatic response to crises” -- i.e. they did not panic.

Experimental designs produced the same general results. Zheng, Veinott, Bos, Olson & Olson (2002) created five conditions of social activity before engaging in a social dilemma task in which cooperative bidding produced bigger rewards. The five conditions were face to face, social chat (text messaging), posting of a picture, posting of a personal information sheet (similar to a resume), and nothing. The task was a multi-trial version of the prisoner’s dilemma task involving simulated day-trading on the stock market. The paid player pairs were rewarded for cooperatively investing but did not know the exact amount the other invested due to simulated
stock market fluctuations. Trust was measured by the amount of money cooperatively invested. After every five trials the pairs of participants were allowed to communicate via an internet chat program. The trust was between (or relatively not) the partners of a pair.

Photo, chat and face to face conditions produced statistically significant, and socially meaningful, higher payoff scores than the nothing condition. The questionnaire evaluations of trust produced similar results. By the end of the 30th simulated day, all groups produced more cooperation.

Open questions remain about the importance of visual personal information (media effects), how the trust would be created in non-laboratory tasks, and temporal effects (Zheng, Veinott et al. 2002). In the experiment the participants did not know each other. In an organization, the participants would often be at least acquaintances and would understand that they might work together in future tasks. Thus the details of the form and amount of social online exchange in organizational blogs are of both theoretical and practical value.

Beranek (2005) experimented with relational and trust training on 48 virtual student teams of 3 – 4 students over eight weeks of work on three tasks. Trust training (communication protocols, timely and substantial communication) and relationship training (social information and enthusiasm) proved to be virtually interchangeable in terms of trust in other members as measured at three times. Both were significantly better than the no-training condition and a “double dose” of both was not significantly better.

Weblog technologies include comments facilities that permit readers – subject to access rules -- to engage easily in a discussion about particular blog entries (Efimova and de Moor 2005). The socio-technical system affordances matter. They create flexibility in the way people interact and leave varying traces of those interactions, including say notes on phone calls. (Interestingly, blogger.com, for one example allows phone calls to be attached – and of course podcasts.) For another example, Efimova & de Moor studied two socio-technical context elements of blog conversations. “(1) Rhythm and media choices: activity levels over time, uses of posts vs. comments to add a contribution, indications of other media used. (2) Linking practices: linking and quoting, linking in summaries, links to one's own weblog.” (Efimova and de Moor 2005, 3) As suggested below, contributors could rate and be rated on, the dimensions of Habermas’ theory of communicative action (TCA). E.g., “So and so was only trying to make the point that we follow our norms for discussion . . .” Sarbanes-Oxley financial accountability
legislation requires preserving instant messages in some firms. Could that be an impediment to blogging by preserving off-the-cuff remarks?

Mandelli (2004) pointed out several important considerations concerning online communities. Using a transaction cost approach, she provided justification for recognition that maintaining social connections is not “free.” That is it requires resources. I propose to survey the degree to which firms recognize this and as one measure, commit resources to blogging.

Azechi (2005) provided an informational humidity model claiming that “wet” systems provide personal specification (which could include trust) and personal identification elements and are suited to tacit to formal knowledge creation. That would correspond to the organizational blog. “Dry” systems with no personal information, he asserts, are suited for community members to convert formal knowledge to their own tacit knowledge. Azechi recommended that dry and wet systems be isolated to reduce (unproductive) “flaming.” This claim could be tested by looking at the ratings of blogs that mixed personal and business matters compared to blogs that kept the matters separate – pure k-logs.

Azechi stated that a pilot study showed that the “dry” community enhanced the motivation of community members to present and obtain information. This runs counter to the research discussed above in which conditions for “wetness” may improve collaboration – as contrasted with the transfer of “facts.” Of course in practical business problems neat divisions of type of community may be difficult to realize. However Azechi’s higher goal is point out such concerns for the discipline of social intelligence design (SID). “. . . SID is defined as a design that clarifies what features are needed for systems that mediate communities and improve their knowledge-creating activities.” (Azechi 2005, , 110-111).

“Wetness” appears to foster the affect-based trust described by Daniel McAllister (McAllister 1995). While McAllister documented through factor analysis that affect-based and cognition-based (“dry”) are distinct, reliable constructs, only affect-based trust was significantly related to organizational citizenship behaviors (OCB) and performance ratings.

Costigan, et al. reported a similar finding with trust by supervisors. Affective trust was more important than cognitive trust (Costigan, Insinga et al. 2007).

Another important function of trust is to facilitate delegation (Mandelli 2004). People delegate more substantial or significant projects to other people they trust. This promotes efficiency.
A combined blog & wiki service provider noted that services like his (See www.socialtext.com) promote “letting go” or delegation:

“... We spent a lot of time developing physical infrastructure, and now we have to develop the social infrastructure on top of it. The earliest adopters of the Internet were the geeks and hackers who were using the web for social purposes. Out of all that social interaction they realized that if they could find a way to let go of a tiny bit of control, they could invent whole new models of production. They could encourage common-goal production, rather than production driven by markets or companies.”(Mayfield 2005).

Note however that some employees may see “over trust” or excessive delegation as abdication of responsibility (Jarvenpaa, Shaw et al. 2004). Sutanto, Phang, Kuan, Kankanhalli, & Tan (2005) independently reinforced Jarvenpaa, Shaw & Staples’ findings of the importance of structure, assignment of roles, coordination and shared mental models in virtual teams. Otherwise they said, a virtuous circle can turn into a vicious circle. An example of vicious circle behavior would be status-driven vertical communication between two members and not shared with the group. Kramer and Cook (2004) raise the question of how trust work in the context of power relationships.

Trust is an important component of social capital, in fact the basis of networks within organizations. Social capital is said to have relational, cognitive and structural dimensions -- all of which help or hinder knowledge creation (Huotari and Iivonen 2004). I are not proposing studying trust in general – for example online trust in e-commerce – but rather trust within organizations and groups as promoted (or not) by blogs. Social capital provides a general framework for my research.

**Personality Theory of Trust**

Brown, Poole & Rodgers (2004) proposed that for online collaboration, propensity to trust is most usefully considered as a relatively stable part of personality rather than consequences of social characteristics, interaction processes and institutional processes. They apply the interpersonal circumplex model (ICM) as the theoretical basis. In that model respondents are classified on the basis of location relative to orthogonal dimensions of
dominance vs. submissiveness and affiliation vs. hostility. For example, the model predicts that persons high on dominance and hostility will be mistrusting while those moderate on dominance and affiliation will provoke trust. They illustrated their propositions with the work of Jarvenpaa and Liedner (1999) in which virtual collaborative groups with low initial trust did not make an effort to get to know each other before tackling the tasks. Such behavior would be explained by personality variables and could be overcome or at least mitigated by actions structured by the affordances of the technology.

In the context of e-commerce, McKnight, Choudhury & Kacmar, C. (2002) made excellent measures on disposition to trust. Disposition to trust is a psychological trait of individuals. Sub-concepts include faith in humanity, trusting stance, faith in competence of others, and faith in the integrity of others. Their e-commerce focus of institutional, structural trust would need modification for applications outside of e-commerce.

D. Modes of Interaction

Group Theory

Progress in Internet technology has not only made more options available for group support but it has also changed the way firms are organized and do business. Globalization and increased outsourcing are prima facie evidence that the network society has changed the way we all work and live (Castells 2000). Fulk and Collins-Jarvis (2001) cited studies that showed managers spending 25 to 60% of their time in meetings which are increasingly virtual. Improving the efficiency and quality of meetings by appropriation of technology offers a challenge and an opportunity. Blogs may reduce the need for formal meetings whether face-to-face (FTF) and/or on-line.

Meetings automatically signal group behavior. As a much-researched field of sociological study, group theories may provide insights on where to look for prior conditions and effects of blogs. Waldeck, et al. (2002) in introducing new areas for group research, classified the field into four major perspectives, functional theory, symbolic convergence theory, group structuration theory, and the bona fide group perspective. I briefly outline the key elements of each according to Waldeck, et al. (2002) and the research opportunities suggested by the authors.
that may be viewed as being significant for GSS research generally, and blog research specifically.

“The basic premise of functional theory is that group performance depends on how well communication functions within the context of a group to satisfy requisite conditions for successful group problems solving and decision making.” (Waldeck, Shepard et al. 2002, 4).

The elements of the theory include critical requirements of a task, enablement of group members in terms of interests, resources, processes, obstacles, interventions etc. in the context of certain assumptions. Blog research may help contribute functional theory by studying natural groups, clarification of central constructs such as trust, and isolating specific communication processes and group member communicator characteristics that predict the effectiveness of group decision making and problem solving. Blogs can help present, formalize, document, and discuss the functional elements listed above.

Symbolic convergence theory (SCT) was developed in the 1970’s with roots in work by Bales in group communication (Waldeck, Shepard et al. 2002). They stated, “The basic assumption of SCT is that humans, by nature, interpret and give meaning to the signs, objects, and people they encounter. SCT scholars argue that when groups of people share and interpret human symbols, or messages, they create a common consciousness, or shared reality” (Waldeck, Shepard et al. 2002, 9). SCT talks of rhetorical vision “. . . or a composite drama that draws people into a common symbolic reality . . . . Three primary master analogues drive rhetorical visions: righteous analogues (“right and wrong, proper and improper, superior and inferior, moral and immoral, and just and unjust . . . social analogues (containing relational factors such as “friendship, trust, caring comradeship, compatibility, family ties, brotherhood, sisterhood, and humaneness . . . or pragmatic analogues (stressing “expediency, utility, efficiency, parsimony, simplicity, practicality, cost effectiveness, and minimal emotional involvement“ (Waldeck, Shepard et al. 2002, 9-10). SCT researchers use methodological tools such as Q-sort analysis and content analysis in addition to observation. Some of the constructs are useful in describing the changes observed by structuration. Blogs are hypothesized to contribute to the identities of contributors and strengthen identification with the analogues of the firm – the stories, mission, vision, etc.

Giddens’ structuration theory explains why the actions of a group (or other social entity) influence each other recursively. Structuration theory has been useful for explaining processes
and changes but not so for predicting specific outcomes (Waldeck, Shepard et al. 2002). Thus there are research opportunities in demonstrating the recursive action and structure changes and coupling documentation of the initial conditions with structural changes, stabilizing activities, etc.

There is an opportunity to integrate structuration theory with functional theory by taking a process view (Waldeck, Shepard et al. 2002). For example, changes in structure can reinforce the functional requirement of appropriate rules for interaction. This is exactly the kind of research applicable to GSS, or blog: process improvement in theory and practice. Furthermore, I speculate that blog popularity is a confirmation of the model-driven view of group support (Morton, Ackermann et al. 2003) that emphasizes decision processes rather than events.

In particular, the Adaptive Structuration Theory (AST) looks at how the “appropriation” of technology restructures the group using a GSS. Researchers look at a number of dimensions on three levels of analysis such as the micro, ‘global’ and institutional corresponding to individual speech acts, the meeting, and multiple groups in the organization (DeSanctis and Poole 1994). AST has been proposed as a bridge between the European-centered model-driven perspective and the U.S.-centered technology-driven group support research described by Morton, et al. (2003). “AST can also enhance our understanding of groups in general, not just those using technology. The major concepts of AST . . . cover the entire input --> process --> output sequence that [2 papers cited] advocate as an organizing paradigm for group research. AST provides a general approach to the study of how groups organize themselves, a process that plays a crucial role in group outcomes and organizational change.” (DeSanctis and Poole 1994, 143). Their paper invoked the multi-dimensional concept of “spirit” to characterize a GSS. Their dimensions of spirit are

“Decision process  The type of decision process that is being promoted, for example consensus, empirical, rational, political, or individualistic . . .

“Leadership  The likelihood of leadership emerging when the technology is used, whether a leader is more likely or less likely to emerge, or whether there will be equal participation versus domination by some members . . .

“Efficiency  The emphasis on time compression, whether the interaction periods will be shorter or longer than interactions where the technology is not used . . .
"Conflict management" Whether the interaction will be orderly or chaotic, lead to shifts in viewpoints or not, or emphasize conflict awareness or conflict resolution . . .

"Atmosphere" The relative formality or informal nature of interaction, whether the interaction is structured or unstructured" (DeSanctis and Poole 1994, 127), references omitted).

Spirit appears to be similar to organizational climate. The “spirit” of organizations promoting blogging is hypothesized to be different than those not blogging. Blogging is inherently reflexive in accordance with structuration theory through processes of appropriation and adaptation of this new technology.

The fourth major theory described by Waldeck, et al. (2002) was the bona fide group perspective (BFGP). The key concepts are permeable and fluid boundaries of the group, and interdependence with context. This view of the group recognizes the real nature of mostly stable groups embedded in organizations. BFGP offers rich opportunities for understanding group processes by capturing references to outside groups. Blogs certainly facilitate permeable and fluid boundaries if they are open. Many have a closed membership.

While Waldeck, et al. (2002) make only a brief reference to network theory of groups in their theoretical overview, many including this researcher believe that the social network perspective is a rich research area deserving specific attention. It fits with the BFGP. Analysis of blog links could, for example, document the need for a group to improve (alter, etc.) its members’ network connections. Blogging is social networking tool.

Argument and Communication Interaction in Groups

Regardless of the theoretical perspective used to analyze group functions, the injection of new social technology should induce changes in patterns of interaction. One of this research proposal’s approach to argument concerns speculations on the application of Habermas’ communicative action to collaborative systems. The argument approach has a tradition focusing on argument as rational, convergence producing, decorous and verbal (Meyers and Brashers 2002). Both activist groups and governments use some non-traditional argumentation approaches such as slogans and chants, vilification of opponents, expressions of anger and visual.
argument (Meyers and Brashers 2002). One would expect that organizational groups would overwhelmingly use traditional argumentation conforming to Habermas’ theory of communicative action in trusting environments, but multi-media elements are increasingly used. Constructive disagreement may be facilitated by blogs but perhaps grandstanding and flaming may be reduced compared to email exchanges.

Barge (2002) made a case for a new “language game” of group deliberation that he called dialogue rather than the traditional functional group theory of discussion or debate. He claimed that traditional debate concentrates too much on shortcomings and deficits. The alternative language game of dialogue – “what should be” -- would focus identifying and creating positive resources for change.

A few GSS projects, practical and research, used the general concept of Habermasian ‘ideal speech’ according to Sheffield (2004). He designed GSS interactions for a large regional planning effort based on the validity claims (plus intelligibility) of Habermas’ theory of communicative action (TCA). In brief, the three claims are sincerity or truthfulness of a speaker, (social) rightness or consistency with norms, and objective truth. Communicative action is complex. As Habermas noted, “. . . [An] actor who is oriented to understanding in this sense [rationality potential] must raise at least three validity claims with his utterance, namely:

1. That the statement made is true (or that the existential presuppositions of the propositional content mentioned are in fact satisfied);
2. That the speech act is right with respect to the existing normative context (or that the normative context that is supposed to satisfy is itself legitimate); and
3. That the manifest intention of the speaker is meant as it is expressed.” (Habermas 1984, 99)

Blogs, via their reflective nature should create a trusting social climate. They encourage challenges to validity claims.

While accepting the richness claim of an interpretivist approach to blogs, it should be possible to validate the claims of interpretivist and critical theory – e.g. Habermas’ TCA – approaches using empirical techniques. Specifically, the degree of compliance with validity claims could give a reliable measure of GSS or blog success when compared to output measures.

---

A Wittgenstein language game is a form of specialized discourse among members of a community that reflects their underlying view of reality and shared understanding.
and structural changes. Sheffield (2005) spent a lot of energy over years of effort to conclude that his GSS processes based on a Habermasian perspective produced insights into the effectiveness of some regional planning concepts. Such efforts are economically justified for billion-dollar public works projects and important issues in large corporations. However, “everyday” decision processes have to be much more efficient, cost effective, easy to implement, and “good enough.” Hence collaboration engineering has emerged as an applied, practical social science discipline (Briggs, de Vreede et al. 2003). Internet-hosted solutions are likely to be affordable and better than “good enough.” Organizational blog policies are hypothesized to predict how communication changes from TCA mode to Discourse mode.

Sheffield first designed the regional planning process using TCA concepts and then evaluated it using observation and interviews with participants. If TCA is more than just philosophy, it should be confirmable in by blog-collected (example, on-line commenting tools) survey data from participants. As a practical matter, the TCA/validity claims theory, if it is valid, should be translatable into more rapid decision making and collaboration than a complicated urban planning consultation and decision.

Shortcomings and inconsistencies in Sheffield’s (2005) evaluation – agreement on certain facts but voting for another solution – illustrate a possible limitation of TCA in that Habermas projects TCA’s applicability to situations where the parties are focused on reaching understanding. In contrast, strategic actions are social actions but are success-oriented and not dependent on mutual understanding but rather “exerting influence” or power claims (Habermas 1998).

The underlying goal of, or reason for, communicative action is rationality. While examination of the validity of a rationality concept is debated by critical philosophers, few would challenge the idea that rationality is desirable in organizations. As Habermas (1979, 97) says, “In these validity claims communication theory can locate a gentle but obstinate, a never silent although seldom redeemed claim to reason, a claim that must be recognized de facto whenever and wherever there is to be consensual action.”

The importance of studying interactions in groups was emphasized by Suthers (2005) who called for creating interpretations as well as knowledge-sharing through interaction in learning communities. That interaction would also involve disagreements from time to time. Part of the knowledge, an “interactional epistemology,” would be those interactions. That social
view of knowledge is entirely consistent with the idea popularized by Senge that modern, successful companies are learning organizations (Harris 2002).

Organizations may benefit from healthy disagreements (the concept needs definition) by attracting more people into debates and refinement of the ideas expressed. Pascale & Sternin (2005) promote the positive deviance model in which the community is the guru. “Only when people feel safe enough to discuss a taboo and when the community is sufficiently invested in finding solutions can the prospect of an alternative reality appear.” (Pascale and Sternin 2005, 77). Blogs may help positive deviants to emerge.

Psychological safety is a group or team concept closely related to trust (Edmondson 2004). She distinguished it from trust by three factors: the object of focus, time-frame, and level of analysis. In psychological safety the individual considers whether others trust him (trustee), whether he will be given the benefit of the doubt. The individual considers how others will act in the role of trustor. Psychological safety applies to a specific time and action. Will duty, or saying or doing the right thing overcome any tendency for embarrassment? Finally, Edmonson proposed that team psychological safety is a sociological factor rather than a personality trait. Team psychological safety may work in the larger context of, or be institutional trust (McKnight and Chervany 2002).

Similarly, Michael A. Roberto warns about the importance of constructive conflict in his book *Why Great Leaders Don’t Take Yes for an Answer* (Roberto 2005). The benefit to the firm comes from a balance between consensus and conflict, and coming to resolutions and decisions after periods of conflict.

Systems of collaboration are the heart of network organizations. But technology is not the key element – it is necessary but not sufficient. The key element is “mentality” – networking inside and outside the firm (Castells 2000). Fukuyama (1995) claimed that the most important interaction concept is “spontaneous sociability” because it provides a capacity to form new associations and work within the rules of a new group.

Ba (2001) also noted the importance of sociability. Socializing helps build, and later sustain, information-based as well as the regularity or normality requirement of sociologically-based trust. Ba used game theory to show that community-based trust will be effective provided that the parties within a community have repeat transactions, fixed identities, and the previous
history of transactions is common knowledge. These are exactly the conditions of a fostered by
a blog with postings and comments being by identified individuals.

Field Theories and Group Processes

An older view of the network was the concept of positive interdependence among group
members as the basis of achieving group goals (Johnson and Johnson 1997). They went on to
observe that social interdependence theory originated from Kurt Lewin’s field theory that was
formalized by Lewin’s student Morton Deutsch. Field theory is an approach to adding up
psychological and social forces (tensions) acting on individuals in a “phase space.” Lewin may
be credited with breaking down sharp divisions between the proponents of psychological and
social theories. Socially constructed tensions can move the individual to satisfy needs thus
reducing tensions (Lewin 1951).

Robert Bales (1999) is one of the important expanders of the field theory with a system
for rating group effectiveness. Bales’ system has a “vector” of 26 dimensions which correspond
approximately to the 27 cells in a three dimensional cube. (The center of the volume is neutral.)
The dimensions are U-D, values on dominance (Up) and values on submissiveness (Down); P-
N, values on friendly behavior (Positive) and values on unfriendly behavior (Negative); and F-B,
values on accepting task-orientation of established authority (Forward) and values opposing task-
orientation of established authority (Backward). The optimum locations in the 3-dimensional
space for groups, according to Bales, is moderately in the U, P, and F directions. Interactions on
the corporate blogs could be analyzed according to Bales’ system. That is probably impractical
and unnecessary on frequent basis.

Bales and associates have a commercial consulting firm, SYMLOG, which helps
organizations improve the interactional values of their members by rating themselves and each
other on the 26 scales and comparing them to the “ideal.” “Trust in the goodness of others” is
one example and such individuals would be high on the D (Down) and P (Positive) rating scales.
“Ideal” is a scale rating near the average of previous groups evaluated to have performed well.
Firms and individuals receive counseling following the evaluations. The firms hope to improve
their group practices and individual performances.
Media Theory and Interactions

The Internet collaborative technologies including blogs can be considered mass as well as personal media. A major theoretical perspective on media is uses and gratifications. As media blogs have uses and gratifications. Matsumura, et al. (2005) found three factors or constructs in on-line exchanges in Japan’s 2channel, the largest on-line community. The first factor consisted of two types of discussion. The one called chitchat type consisted of people who joined a community to just chitchat, i.e., they did not have a specific topic to discuss. The chitchat discussion was conducted for the sake of interpersonal communication. The other discussion type was conducted by people who join a community to discuss a specific topic they share with each other. This discussion type was threaded and goal-oriented.

The second factor was type of anonymity which could be nameless anonymity (the most prevalent), or handle anonymity using screen names. The existence of corporate anonymous blogging is doubtful except in whistleblower and customer feedback applications.

Finally, there was the relative use of jargon, emoticons. ASCII character combinations [:‐)], deliberate misspelling and other forms of expression.

A clever use of clues in the text allowed machine encoding of eight indices. Of those content length and interaction predicted discussion type communication while speed and activity in a thread predicted chitchat communication.

Managing the flow of information to reduce overload on the one hand, or boredom on the other are important technology goals. To increase the possibility of creative emergence and enhance group creativity are important goals for social intelligence software. Specifically, the idea is to provide cognitive and intelligent stimuli while minimizing distractions in the process of communication among group members. Evaluating exactly what is optimal remains a topic for future research (Miura and Shinohara 2005).

Blogs are not usually real-time chat tools. As such they definitely control the rate of information flow in discussions. Various commercial variants incorporate instant message functions. Briggs, et al. (2003) claimed a multidimensional benefit to managing cognitive load in collaboration systems.

Stafford, Stafford & Schkade (2004) found a social gratification for the Internet that adds to process and content gratifications many researchers have found for television and other mass media. In this research respondents indicated their perceived level of importance on 45
Organizational Climate, Trust & Group Theories for Blogs, K-logs & Wikis  DCS
Draft: Comments Welcome!  Chapter 2: Literature Review

descriptive traits that described potential uses and gratifications for the Internet. The scale was a seven-point semantic differential anchored by “very important” and “very unimportant.” They found three factors, process gratifications, content gratifications and social gratifications. The concepts or traits in the social category were chatting, friends, interaction, and people.

As technology made possible by Internet technology, blogs appear to constructively add a desirable social dimension to content and process functions. Purveyors of blog software make the claim! Both content and process are important to, i.e. provide competitive advantage, organizations.

Tom Kelleher and Barbara Miller recently validated the concept that organizational blogs provide a “conversational human voice” compared to comparable material on a web site. Applying the approach to public relations, they also found that conversational human voice and communicated relational commitment correlated significantly with the relational outcomes of trust, satisfaction, control mutuality, and commitment (Kelleher and Miller 2006).

The voluntary nature of most blogs leads us to believe that the uses and gratifications perspective can also be employed. And in particular, I hypothesize that organizational culture and organizational climate influence, if not determine, blogging behavior. Blogs raise fundamental issues of self-presentation in accordance with the theories of Goffman (1959).

To review, group theories, interaction theories and media theories provide guidance on changes to look for as new technologies are introduced. A host of related questions emerges concerning the practical application of those theories. How to the communicative traits of a person carry over from the blog to a physical or virtual meeting? Do blogs make up for language or cultural barriers? Many researchers believe that there must be challenges and disagreement to facilitate innovation. -- degrees of dissatisfaction. In Lewin’s perspective that would be a force or a need. To what extent are these present, or facilitated by, organizational blogs? What are the communication situations, or conditions or affordances in which a group structures itself so expand its knowledge?

In summary, a wide range of middle level theories can be applied to blogging. Each of them raises many interesting questions.
Chapter 3: Research Hypotheses

This chapter narrows the scope of my research into two parts. The first is a fact-gathering, documentary and descriptive part concerning blogging policy and participation. The second is an exploratory and hypothesis-testing part concerning blogging and variables of trust and organizational climate. This research proposal calls for a survey of high-level corporate individuals who set and/or enforce blogging policy. A separate climate, trust and blogging survey of employees will be administered to answer research objectives and questions as described below. Data will be gathered for descriptive statistics – the extent and nature of the phenomenon -- and to test specific hypotheses about blogging’s influence by, and of trust and organizational climate.

Documentation and Exploration of Corporate Practices

Research Question 1: How do organization’s blogging policies vary in relation to corporate goals and objectives? This will be based on a random sample of publicly traded firms. Previous studies have relied on convenience samples. From the sample I will document organizations’ blogging policies and how they relate to goals and objectives. The study will assess the rules, approval processes, and hardware / software configurations that produce or are perceived to produce positive results. Related questions follow:

- How do firms encourage participation?
- Or do they discourage participation in blogs?
- What are the specific policies?
- How much monitoring is done?
- Do firms attach special importance to blogs because of the need for virtual teams, collaboration with remote partners, network organizations, and other modes of operation driven by the Internet?
- Are the corporate purposes more to provide aids to cognition, or to focus on values and spirit to get people to interact, to socialize?
Organizational Climate, Trust & Group Theories for Blogs, K-logs & Wikis     DCS
Draft: Comments Welcome!                                         Chapter 3: Research Hypotheses

The research question will be addressed by new questionnaires, drafts of which are in the Appendix 1. The question will also be addressed by classifying corporate blogging policies.

**Hypothesis and Relationship Testing**

Strong ties in knowledge worker teams were significant predictors of knowledge creation capability and new product introduction (Smith, Collins et al. 2005). The finding of the importance of strong ties does not negate the classic findings on the importance of weak ties made by Granovetter (1973) and may be a consequence of the nature of the tasks involved. Weak ties bring in contacts and ideas from outside the employee’s immediate work group. There may be a complementarity of weak and strong ties fostered by blogs.

H1: Business blogs by task-oriented groups will be perceived to be more successful if they build both weak and strong ties within the firm, i.e. they bring in people outside the primary task group. Blogging can facilitate such expansion of inputs by encouraging linking.

A whole host of interesting research questions flow from organizational climate such as:

What are the company culture variation and variations in the use of blogs and wikis? What is the company climate on contributing to blogs? Do firms perceive that blogs & wikis work because of the knowledge content or promoting sociality? To what extent are blogs used for building common ground? For agenda setting?

Research Question 2: If and how do blogs and wiki usage correlate with an organizational climate encouraging trusting behaviors, knowledge sharing and knowledge creation? Related questions are

- What is the direction of causality of blogs and trusting organizational climates and trusting behaviors?
- Are certain organizational climates are associated with use of blogs for important or strategic purposes.

H2.1 Organizational climate significantly affects adoption and use of blogs.
H2.2: Contributors’ evaluations of their leaders’ company blogging policies affect blog usage – quantity and quality.

Trust-building activities in advance of formal collaboration can build up social capital. Social capital is “... networks of strong, crosscutting personal relationships developed over time that provide the basis for trust, cooperation and collective action.” (Nahapiet and Ghoshal 1998, 243) In other words the social functions of blogs would be promoted before the need for employment on specific projects. There would be building of trust through social networks and social exchange. (“I know remote colleagues better because of the blog.”) Note that Paul & McDaniel (2004) studied trust between individuals embedded in organizations. We should look for both organizational effects and individual personality effects.

Research Question 3: How are psychological, sociological, and social-psychological trust in individuals in organizations to blogging behavior and other knowledge sharing activities?

Trust levels and type will be assessed with validated instruments in the articles cited above. A final set of measures will be determined in pilot testing in conjunction with the final sampling population.

The key general hypothesis of this research is:

H3: Organizational trust significantly affects and is affected positively by adoption and use of blogs.

Chapter 2 reviewed several recent research papers connecting desirable organizational climates with beneficial outputs for the firm. These benefits included increased productivity, job satisfaction, knowledge sharing, and innovation, to name a few. From those models I selected one that could be augmented so as to demonstrate the effects of blogging.

Recall from Chapter 2 the Collins & Smith (2006) model that linked HR practices to firm performance through organizational climate and knowledge sharing. I propose to focus on the central links of that model as depicted below. I do not rule out the possible effects of blogging on HR policies but that is beyond the scope of this research.
They have a compact, practical set of measures with sufficient reliability to which blogging variables could be added. I would propose to omit the HR variables and focus on social climate, blogging, and knowledge exchange and combination shown in the dashed line. Firm performance would be optional for future work, facilitated by use of public firms.

Collins & Smith analyzed their data by regression analysis. I plan to replicate the Collins & Smith (2006) findings starting with a reanalysis of the correlation matrix using structural equation modeling. With my own data, I will work with the actual measurement model rather than aggregating data within firm or other sample. (Their justification was properly based on the firms’ HR practices being uniform within the firm and satisfactory statistical consistency of perception within the firm.) Breaking out the trust variable, and recasting in an SEM perspective, I recast their model as shown below. It accounts for (adds) about 10% of the variance between HR practices and firm performance.
This research will replicate the model and then extend it by asking what blogging can add by expansion. As noted in Chapter 2, several models could serve as the basis for testing the contributions of blogging. Collins & Smith (2006) have a parsimonious set of validated, theoretically-based measures. Parsimony is particularly important because I must ask additional questions of respondents about blogging.
Figure 3- ___

In addition to adding blogging, the model above and adds work satisfaction. It has the potential to add trust in management on the output side. Note that the trust variables are shown with double-headed arrows indicating tests of virtuous circles with respect to trust. Since work satisfaction is well-documented as a predictor of productivity (Patterson, West et al. 2005), I added that variable as well since it would be an important justification for company blogs. The model provides the basis for testing my hypothesized relationships.

The above model represents a minimum research commitment. Data collected will permit testing of more complex models, or models segmented so as to look at parts of more complex models. Social outcomes, including social networking, are important consequences to be looked for in blog studies.

It is important to note that blogging behavior is not the only intervening variable but may only be a moderator. Alternative models may give better fit to the observed data. Such models will be proposed and tested based on theory and the first round of data collection. (See the data analysis section below.) Survey data will be collected from blog contributors (potential and actual) on general organizational climate, individual trust attitudes, perceptions of blogging policies, attitudes toward knowledge sharing, and reports of blogging behavior. In other words,
data will be gathered on the state of blogging in the organization and attitudes and perceptions that are predicted to influence attitudes and behaviors related to blogging.

Research Question 4: How do blogs change the patterns of communication and discourse in firms? How do perceptions of, and changes in the nature of debate, patterns of interaction, and discourse within the organization attributed to, or coincident with, vary with blog activity. Many aspects of organizational communication may be affected by blogging.

- Will increasing the effectiveness of online collaboration be rated as a crucial objective for organizations to remain competitive in the Internet era?
- Do employees perceive that blogs help creativity?
- Do employees challenge each other more with blogging? Does blogging reduce groupthink?
- Does blogging beforehand make meetings more productive?
- Do corporate bloggers perceive that it is time well spent? And why?

Many hypotheses come to mind.

H4.1 Employees in organizations using blogs will report less email overload.
H4.2: Employees rate the amount of project or task-related email as less with blogging in use.
H4.3 Organizations with higher levels of trust will favor blogs over email for project coordination.
H4.4 Use of blogs will stimulate the use of phone contacts.

In summary, numerous practical and theoretical [be more specific about precisely what theory] questions will be answered by this research.
Chapter 4. Research Methodology

Case studies, surveys, and laboratory experiments are ways to investigate the questions and hypotheses of this research. In some cases, the questions dictate the approach. In others, there a variety of tools would suitable. I discuss each briefly below.

General case studies of the blogging of specific firms, mainly concentrating on public relations issues, have been done. For example see the book *Naked Conversations* by Scoble & Israel (2006), and more are undoubtedly in work. Wright’s (2006) book, *Blog Marketing*, does devote substantial space to the benefits of intrafirm blogging. Detailed case studies of specific firms and the changes introduced by blogging would be of great interest but best left to others at this time.

Laboratory experiments could be practical. If carefully done with respondents randomly selected from appropriate populations, experimental data would overcome challenges to generalizability. Experiments would test hypothesis from survey research demonstrating associations. The key goal would be to get findings on causality.

One approach would be to use an actor to present alternative blogging policies to a group of subjects. The policies could vary on degree of control, scope of the audience, organizational support, and management participation, for examples. The participants in the different treatment groups would complete organizational climate and trust surveys based on their experience and perception of the policies. As noted previously, Kelleher and Miller (Kelleher and Miller 2006) compared differing perceptions of a firm produced by blogs and a conventional web site.

I have chosen to do two types of survey research because they are adequate to provide useful answers in the context of validating and extending an existing model. Some clues as to causality will be inferable because of variation in blogging experiences – time, quality, and quantity variations – and the use of structural equation modeling.

A. Survey of Corporate Blogging Policies
The first survey will be on corporate blogging policy and goals. Data will be obtained from corporate spokespeople and by examining written documents. I must clearly understand the organizational unit for which a blogging policy maker provides information. Ideally all units of analysis must be sampled randomly. That is individuals, divisions and firms should be randomly sampled unless 100% samples could be obtained. There may be some practical compromises but random or stratified random samples must be the goal. However, its practicality depends on access to firms in an unbiased manner. Several approaches varying widely on randomness come to mind. These include

- Contacts through professional organizations and associations such as chambers of commerce, IT professionals, etc. The Pacific Telecommunications Council is one example. Another could be the Hawaii Telecommunications Association or the local chapter of the Association of Information Technology Professionals would be other examples. Such organizations are likely to provide sympathetic introductions however there is an element of self-selection.

- Selection from lists or directories of businesses. For example in Hawaii basic contact information on each registered business is available from the State in digital form for five cents per listing. Selection criteria facilitate elimination of useless contacts such as inactive firms. A related approach would be culling of websites from digital versions of telephone directories. National listings are also available, for example publicly listed firms. Stratified random sample can be done from lists of businesses. (I have the Wilshire 5000 on hand.) A criterion could be those that have public web sites based on the idea that if there is a public web site there is a better chance of having a blog than if no public web site.

- Automated searching of Internet sites. Sorting the “wheat from the chaff” in such an approach is non-trivial but may be practical.

- Some geographical – and business -- diversity beyond Hawaii is highly desirable. Large U.S. West Coast cities are candidates The San Francisco Bay Area is a geographically accessible areas.
Choices must be made in parallel with other research requirements, such as human subjects clearances and finalization of more precise research questions. Time and money are practical considerations. A sample from which generalizations could be made would be an important contribution as much of the past blog research has been ethnographic in nature based on small “representative” samples. Resource people within UH Manoa will be consulted on ways to approach firms or possible cooperation with existing research projects.

A rough estimate of the number of firms desirable is about 100 – 150. Ideally, accompanying the policy study would be a sample of 20 to 50 persons in each firm in a workgroup to which the policy applied. (In a large firm with many divisions there is the risk of the ecological fallacy of uniform application of policy. I avoid that in all cases by asking about individual perceptions of blogging policy.)

Blogging policies will likely vary significantly between industry and firm size. Larger, more diverse samples will help resolve that claim.

The concepts of organizational climate and trust are applicable to organizations beyond businesses. For example, blogs are a method of citizen involvement in schools and civic organizations.

Given the options available, I make the choices describe below. The first element of the research is collection of blogging policies including written policies and survey of policy makers. A stratified (on revenue) random sample of firms in the Wilshire 5000 will be contacted by phone and email to find out about their internal and external blogging policies. In addition annual reports will be searched for blogging policies, and commitment-based HR policies. The contacts initially will be through firm communication offices. The important criterion for use of publicly traded firms is that financial performance data are available. An essential part of this research will be the interviews of key policy-making individuals concerning the use and trust in employees for internal blogs. The proposed surveys of firms and organizations concern the existence and uses of blogs and the levels of organizational support for blogging.

Furthermore, the interviews will provide opportunities to ask for access to the employees of firms for blogging surveys. Or in some cases they firms may have data that they are willing to share in deidentified form. Draft interview scripts are in Appendix 1. One hundred firms is the
proposed sample size. Analysis of financial data and the relationship to blogging will be available for future research.

Time permitting, the second part of the blogging policy survey will be of the “Best Places to Work” firms. The proprietary employee survey used for selection (from firms that nominate themselves) is known to have a significant trust component (Fulmer, Gerhart et al. 2003). Thus comparison of the “Best” with a comparable or random group on blogging practices will be informative. A drawback of the group is that many are not publicly traded and therefore financial data will be largely unavailable.

B. Surveys of Individual Blogging, and Perceived Organizational Climate, and Trust.

In an ideal research design, random samples of individuals from a random selection of firms and work groups within firms would be surveyed. Furthermore, a longitudinal design would better support practical and theoretical claims of causality but that must be left for the future Challenges to validity will be addressed concerning the compromises required to make this study practical.

I propose to study two populations. The first is consists of MBA students from business schools in Hawaii. The second is the individuals in at least one work group in one firm with substantial blogging participation among employees.

Use of MBA Students

The use of student is frequently a source of criticism of social science research. MBA students however are not a bad choice since they often represent a wide range of industries, age, and experience. Many are employed while attending school. Many schools prefer students with business experience. Many are international students. They are quite computer-savvy. I expect that some of them have a range of blogging experience both personal and at work. I will attempt to survey students from all the MBA programs with substantial in-person components in Honolulu. Each draws from somewhat different populations and is not selected on the basis of blogging experience.

Convenience Sample from Firms

Surveys within a few firms will limit generalizability. Special conditions for blogging in one firm could differ significantly from others. A random sample of employees drawn from a
large number of firms would be ideal. Working down from that ideal, the achievable will be a small convenience sample across a broad range of industries. The commitment for this research proposal is to do a good survey of employees in one firm gathering enough data to test the model. As the survey will be online, adding a few more firms will be practical. Even a small sample of firms, as proposed, will provide valuable comparisons among themselves and with MBA students.

The data from each group, and collectively will be compared using the model discussed in Chapter 3.

C. Variables and Their Measures

Surveys of individuals will be conducted online using one of the good survey systems such as Survey Monkey.

1. Blogging Experience

The blogging experience and perceived effects and value of blogging will be surveyed using the questionnaire shown in Appendix 4. Experience questions will ask about how long the person has blogged, the level of blogging per day or week, and personal versus business blogging. For business blogging, questions will probe the perceived personal value and the understanding of the objectives of the firm in allowing and/or promoting blogging. New questionnaire items, drawn from the recent blog literature (e.g. (Jackson, Yates et al. 2007)) and my hypotheses, will be pilot-tested before the main surveys. Subscales may range from operationalizations of Habermas’ TCA to Fukuyama’s spontaneous sociability.

2. Trust

There are many trust measures in use. The challenge is to select one set which has the best balance between validity, reliability, and brevity. Serva, Fuller & Mayer (2005) focused on reciprocal trust between development and management teams. It is built on good theory but would require significant rewriting. Lee & Choi (2003) is another good set.
I will use, wherever justified, the scales used with prior research related to the model being expanded. Thus, trust in peers will be evaluated with the Collins & Smith (2006) scales – 12 items total, four each for competence, benevolence, and integrity -- adapted from the well-known Mayer, et al. theory (Mayer, Davis et al. 1995) and the Meyer & Davis (1999) empirical research. The latter also supplies the items for trust in management.

If I decide to include measures on individual disposition to trust, I will adapt those of McKnight, D. H., Choudhury, V. & Kacmar, C. (2002) who made excellent scales on disposition to trust. The e-commerce focus of institutional, structural trust will need modification. This study will follow the recommendation of McKnight & Chervany (2002) that their model be tested with trust related behaviors, i.e. go beyond the trusting intentions expressed in their experiment, to blog, for example.

The trust scales are shown in Appendix 2

2. Organizational Climate

Organizational climate is a multi-dimensional concept. “Climate refers to a contextual situation at a point in time and its link to the thoughts, feelings, and behaviors of organizational members.”(Bock, Zmud et al. 2005, 89) Climates exist for various desirable behaviors and may be considered as the manifestation of higher organization cultural values – including of course management theories.

“These climates represent employees’ perceptions of organizational policies, practices, and procedures, and subsequent patterns of interactions and behaviors that support creativity, innovation, safety, or service in the organization.”(Patterson, West et al. 2005, 381) These concepts are frequently described as “structural assurances.” Somewhat surprisingly, Patterson, West et al. (2005) lack an organizational trust environment measure beyond one item but there are other scales as noted.

Several recent and well-validated measures are available. Selection must involve careful choices. Ones used should be those accounting for the most variance while being consistent with the theoretical perspective.

- Autonomy
- Integration
- Involvement
- Supervisory support
- Training
- Welfare
- Formalization
- Tradition
- Innovation & flexibility
- Outward focus
- Reflexivity
- Clarity of organizational goals
- Efficiency
- Effort
- Performance feedback
- Pressure to produce
- Quality


- Fairness
- Affiliation
- Innovativeness
- Attitude toward knowledge sharing
- Anticipated reciprocal relationships
- Subjective norm – on sharing
- Sense of self-worth


- Reward
- Warmth
- Support
- Risk (tolerance)
- Autonomy

The last and best choice is Collins & Smith (2006) because of its direct theoretical fit and parsimony. In addition to the trust scales mentioned above we will use the measures for

- Cooperation
- Shared codes and language
Furthermore, the Collins & Smith (2006) measures for knowledge exchange and combination will be used. Along with organizational climate, those measures appear in Appendix 3.

D. Data Collection

Primary data collection would be by web survey for general employees. In the case of policy makers, rather than a survey on the ‘Net, interviews, by phone or in person are essential to producing better response rates, and ease the approvals of employee participation.

E. Data Analysis

Descriptive Data

This analysis of the descriptive data requires two basic types. The first is simple tables and cross tabs such as

- Industry vs. blog type
- Firm size by number of internal and external blogs (if any).
- Etc.

The second type consists of analysis and classification of blogging policies according to industry, firm size, etc. based on survey (or interview) data and content analysis of written blogging policies. In all cases each of the distributions will be examined for defects such as skewness or coder bias.

F. Relational and Potentially Predictive Data

Reliability and Validity

Each of the scales will be subjected to scrutiny of the distribution for skewness, outliers and other defects. Transformations to more nearly normal distributions will be made where such transformations are consistent with retaining validity. Reliability and confirmatory factor analysis results must be examined for consistency with the variable definitions.
Correlation data will be presented with scatter plots where that will aid interpretation and understanding.

Summary statistics:

- Distributions and plots. Near normal distributions are particularly important to support the assumptions of structural equation modeling.
- Reliabilities – Cronbach alpha
- Correlation matrix – for each scale and sub-scale.
- Factor loadings. Each scale such as trust, and organizational climate are multi-dimensional concepts and each will be dissected to determine if the results are consistent with previous research.
- Testing for covariance.

G. Model Testing

Finally the data analysis would reach the prime questions related to the mutual influences of trust, organizational climate, and blogging. The test is whether an effect for blogging can be found as an addition to a model linking trust and organizational climate to knowledge sharing and combination. I will also look for virtuous (or vicious) circle in those variables.

As expressed in the simple summary model, multiple regression and path analysis are satisfactory for testing the predictive power of variables. However for comparison of competing models, especially where some variables may be considered latent, structural equation modeling (SEM) is more mathematically complex but produces more intuitive output. Technically SEM is the analysis of covariance structures. Covariance structure modeling is a combination of confirmatory factor analysis and multiple regression but if not used with care and with theoretical justification, many alternative models can appear to be satisfactory (Breckler 1990). For this research which is somewhat exploratory, modeling would be based on further examination of the theory combined with tentative hypotheses developed from data collected. Full attention to the technical issues of reliability and identification in SEM must be given before collecting data. Structural equation modeling will be done with AMOS.
Sample Size

Structural equation modeling is a large sample technique. Kline offered that over 200 cases could be considered “large.” Sample sizes from 100 to 200 could be considered medium (Kline 1998). Therefore the number of cases should be 200 or more.

Number of Observations

The number of observations is not the sample size, also called the number of cases. The number of observations does not change with sample size. Informally, the number of observations is the number of variances and covariances among the observed variables. The central part of the original Collins & Smith model had 33 items total in the questionnaires, so the number of observations was 33*34/2 = 561.
Chapter 5: Research Findings

TBD
Chapter 6: Discussion of Results

To be based on the results

VII. Potential Contributions to Research

This research could contribute to knowledge of an important social phenomenon by

- documenting the extent and purposes of blogging in organizations
- collecting and categorizing blogging policies
- examining the use of blogging in relation to organizational climate
- examining the perceived and desired relationship of blogging to knowledge management
- examining the association of blogging with trust in organizational climate
- examining a potential link between a trusting organizational climate and actual contribution to blogs
- examining personal dispositions to trust and their relationship to blogging behavior.

Practical contributions

The research may provide some guidance to firms on making the best use of blogs to build and reinforce company values and increase performance by mobilizing people, building relationships, and increase knowledge building and sharing.

Limitations and Suggestions for Future Research

Depends on the conduct of the research, the results and the adequacy of the sample.

Financial comparisons related to blogging will be available for the public firms, the focus of this research.
Appendix 1
Survey of Corporate Spokespeople and Blogging Policies

Appendix 2
Trust scales

Appendix 3
Organizational climate scales

Appendix 4
Consent form
Individual blogging behavior and perception survey
Administrative Matters

Proposed Schedule

2007
Winter 2007
   Recruit committee members, refine proposal
   Draft web questionnaires; possible interviews with those in firms responsible for
   blogging policy.
   Defend proposal
   Submit draft instruments and design to IRB (human subjects authority)
   Interview spokespeople on blogging policies
   Pilot the questionnaires
   Gain access to firms for surveys.
   Post Web-based questionnaires
Summer 2007
   Input data
   Conduct any experiment
   Analyze data
Autumn 2007
   Write up data
   Defend
Spring 2008
   Graduate

Budget
Surveys on the web and phone interviews are inexpensive. For example, the Survey
Monkey Professional service is $20 per month. Some duplicating budget for any respondent
wanting a paper survey would be a prudent contingency. Letters of introduction may require
some mailing expense.
References


BusinessWeek (2005) "Blogs will change your business. (Cover story)." *Business Week Volume*, DOI:


Organizational Climate, Trust & Group Theories for Blogs, K-logs & Wikis

References


Edelman (2006) "New Frontiers in Employee Communication." Volume, DOI:


Mayfield, R. (2005). Wikis, Weblogs and RSS: What Does the New Internet Mean for Business? (Interview by Knowledge@Wharton, Published: June 29, 2005). Knowledge@Wharton.


