

The Pennsylvania State University

The Graduate School

College of Communications

**A Networked Work-Life:
A Study of Employee Use of Intranet Media
and Organizational Communication**

A Dissertation in

Mass Communications
by

Justin Walden

© 2013 Justin Walden

Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Doctor of Philosophy,

August 2013

The dissertation of Justin Walden was reviewed and approved* by the following:

Denise Bortree
Assistant professor
Dissertation Advisor, public relations

Anne Hoag
Associate Professor, telecommunications
Chair of Committee

S. Shyam Sundar
Distinguished Professor, media studies

Dennis Gouran
Professor, Communication Arts & Sciences

Marie Hardin
Associate Dean/Professor
Head of the College of Communications Graduate Program

Signatures are on file in the Graduate School

ABSTRACT

This dissertation explored the social influences on employees' use of technology in two contexts, work and home. Framed by structuration theory and relationship management theory, this mixed methods study also investigated the influence of organizational context and technology on internal communication and the use of a particular communications channel, the corporate intranet. This was a case study of one company, "MaxPort", and considered how this company's employees utilize technology. Findings from 26 in-depth interviews, a survey with 72 participants, and observational data suggest that there are dual patterns of legitimization and de-legitimization with respect to appropriate task-oriented technology use and personal social media in the workplace. Certain behaviors are socially sanctioned and supported (internal blogging for task-completion and the use of the corporate intranet for meaning sharing among employees) while other behaviors (including spending too much time on personal social media) are questioned. Quantitative survey also data reveal a weak to non-existent link between technology use and employees' relationships with their company. Findings of this study suggest that despite the potential for enhanced organizational communication via interactive technology, companies face challenges in information systems/ intranet management and in adjusting to the introduction of social technologies into the workplace. Effective management and the right corporate philosophy to technology can overcome these challenges.

TABLE OF CONTENTS

LIST OF FIGURES.....	vi
LIST OF TABLES	vii
ACKNOWLEDGEMENTS	viii
Chapter 1-Introduction	1
Significance of the Study	6
Chapter 2-Literature Review	8
Technology's Shifting Context	10
Intranets and Interactivity in the Workplace	12
Advancing Structuration Theory	18
Technology's Intended Use.....	21
Organizational Communication with Stakeholders.....	26
Employee-Organization Relationships.....	29
Summary of the Study.....	32
Chapter 3-Research Methodology.....	34
Study Overview.....	35
Research Site and Study Procedures	35
Research Organization's Information Systems	37
Mixed Methods Measures and Data Analysis.....	39
Qualitative Data.....	39
Qualitative Data Analysis.....	42
Quantitative Data.....	43
Quantitative Data Analysis.....	45
Reliability and Validity Checks	47
Qualitative Data Validity Checks.....	47
Quantitative Data Validity Checks.....	49
Participant Demographics (both phases).....	50
Blending Case Study and Grounded Theory.....	50
Researcher Identity.....	53
Chapter 4- Research Question 1 Analysis.....	59
Understanding the MaxPort context.....	59
Rethinking the Work-Life Technology Balance	62
Information and Communications Technology in Two Venues	65
Unsanctioned Social Media Use.....	69
Sanctioned Social Media Use.....	72
Summary of Research Question 1 Findings.....	74
Chapter 5- Research Questions 2 and 3 Analysis	79

Research Question 2- Adopting Technology	80
Overcoming Search Roadblocks	85
Summary of Research Question 2 Findings	89
Research Question 3- Adapting Technology	90
Informal and Formal Workspaces	93
Continuing Technology Use: The ‘helper structure’	96
International Offices and Technology Adaptation	98
Summary of Research Question 3 Findings	100
Chapter 6- Research Question 4 Analysis	104
Respondents	104
Descriptive Statistics	105
Relational Quality Outcomes	105
Technology Use Measures	105
Regression Analyses	106
Chi-square tests	107
Chapter 7- Discussion	113
Rethinking Organizational Structures	113
Current Culture	114
Sneaker	115
Problematic Affordance	116
Helper	117
Emerging Perspectives on Social Media and Work	118
Two Technology Models	122
Applying this Study’s Findings	125
Study Implications	132
For Corporate Managers and Intranet Programmers	132
For Employees	133
For Scholars	134
Chapter 8-Conclusion	137
Study Limitations	137
Directions for Future Research	140
Concluding Thoughts	141
Appendix A- Interview Questions	143
Appendix B-Survey	145
References	147

LIST OF FIGURES

Figure 4-1. Revised structurational model of technology	76
Figure 4-2. Average number of unique monthly visitors to MaxPort's intranet.....	77
Figure 7-1. A new model for the typical stages in learning about a corporate intranet.	136

LIST OF TABLES

Table 3-1. Relationship quality indicators.....	56
Table 3-2. Technology use measures	57
Table 3-3. Identifying key strengths and weaknesses of the case study approach.....	58
Table 4-1. MaxPort’s current culture structure	77
Table 4-2. Distinguishing at-home technology use from at-work technology use.....	77
Table 4-3. Comparing sanctioned and un-sanctioned social technology in the workplace.....	78
Table 5-1. MaxPort’s sneaker structure.....	102
Table 5-2. MaxPort’s problematic affordance structure.....	102
Table 5-4. MaxPort’s helper structure.....	103
Table 5-3. The primary influences on intranet adoption and adaptation at MaxPort.....	103
Table 6-1. Descriptive statistics for Relational Quality Outcomes.	109
Table 6-2. Descriptive statistics for Technology Use.	110
Table 6-3. The Bivariate and Partial Correlations of the Predictors of Trust scale.....	111
Table 6-4. The Bivariate and Partial Correlations of the Predictors of Satisfaction scale	111
Table 6-5. The Bivariate and Partial Correlations of Predictors of Control Mutuality scale..	112
Table 6-6. The Bivariate and Partial Correlations of the Predictors of Commitment scale	112
Table 6-7. Chi-square table for satisfaction by group work.....	112

ACKNOWLEDGEMENTS

With my doctoral program complete, it is time to reflect and express my deep gratitude for a host of people and groups who made this journey possible. My dissertation had an anxious start. I had no guarantee that I would find a company for my study. Thankfully, “MaxPort” agreed to work with me. This firm provided generous support for this study. I extend appreciation to the entire MaxPort company, and specifically, to my liaison, Jennifer.

I benefited from many talented Penn State mentors. Dr. Hoag was an ideal chair; she gave me the freedom to explore multiple areas while also offering direct instruction in the case study approach. Dr. Bortree’s patience and expertise as a dissertation adviser was invaluable; I am also indebted to her for introducing me to PR theory and our outside research. Committee members Drs. Sundar and Gouran also offered valuable help. Shannon Kennan, Betsy Hall, and Marie Hardin in the College of Communications provided the friendship and resources to make this journey through the doctoral program an exceptionally gratifying experience.

At a personal level, my parents, Antoinette and Edward Walden, are beacons of perseverance and hard work who inspired and supported me. In addition, I am indebted to four families. The Dell’Osas, Waldens, Sodanos, and Laams each provided unique expressions of love and support these last four years. You were my cornerstones. And thank you Luci and Moe for being here through the daily grind. We had some wonderful, if not one-sided, dissertation conversations. Finally, I met an incredibly strong, compassionate, and intelligent woman six years ago. I wake up each morning feeling loved by and feeling grateful for Leslie. You are a terrific partner. No question, I am a better man because of you.

Chapter 1-Introduction

Serving as a repository for useful corporate information and functioning as a key internal communications channel, intranets have become a necessary tool for many corporations in the last decade (Child & Shumate, 2007; Edenius & Borgerson, 2003; Wilson, 2011a). Similar to Internet sites in design and structure, intranets provide the digital infrastructure that is required for information sharing between employees, and as well as facilitate collaboration and communication (Bennett, Owers, Pitt & Tucker, 2012; Pilgrim, 2012). These platforms offer a web experience and document storage system for employees, and they remain closed off from public view, as they require user login information and passwords that only a company's employees can access (Murgolo-Poore, Pitt & Ewing, 2002).

Considerable attention has been placed on the effects of interactivity on non-work related Internet use and how people network with each other on publicly accessible social networking sites (see Sundar, 2008 for a key conceptual model and review of the effects of technological affordances). However, recent technological developments suggest a need to further explore how interactive-technology mediates internal (organizational) communication. An increasing number of companies are adopting social media tools such as blogs, discussion forums, and employee-editable wiki sites for corporate information exchange (Wilson, 2011a). No longer static venues for top-down corporate communication, many intranet portals—the newest versions dubbed are “Intranet 2.0” — now feature content that is created and managed by regular employees. The development of these tools presents researchers with an interest in human-computer interaction new opportunities to explore the impact of technology on individuals and organizations.

Companies may be slow to embrace social media in the workplace for fear employees will waste company time on “social networking,” share confidential information with the outside

public, or write something that damages the company's reputation (Conner, 2012; Kelleher, 2011; Shewchuk, 2010). There is a perceived risk in the business community that allowing employees to access internal social media sites and allowing employees to create user generated content will hinder productivity and cause employers legal problems. The de-centralized nature of intranets raises concerns about the potential loss of corporate intellectual property and a hindrance to centralized management practices (Kelleher, 2011). Also, scholarly research in this area shows employees still prefer traditional forms of communication, such as e-mail newsletters and intranet news to internal social media (Friedl & Vercic, 2011). There appear to be concerns from both management *and* employees about whether social media should be in the workplace at all.

This reluctance is countered by multiple industry experts and scholars who believe social media are desirable tools for effective, employee-desired internal communication. By not bringing interactive digital tools and platforms that are commonly available in the outside world to work, companies may alienate a new generation of technology-savvy employees (Wilson, 2011b). "Social media tools are becoming a point of differentiation and competitive advantage as the next generation of potential employees enter the workforce and employers violently scrap to overcome the biggest talent crunch the world has ever seen" (para. 8). Use of social media in our personal lives appears to have led to the expectation that social media can and should be used in our professional lives. Furthermore, traditional internal communication messages that are sent company-wide are failing to meet the needs of its employee audience (Holmes, 2012 a & 2012b). These messages often feature highly optimistic and data-rich messages and are typically meant for senior executives and not regular employees (Davis, 2009). The result is a gap between the types of interactive experiences that people enjoy outside work and what businesses have largely afforded employees in work contexts. Recognizing this gap and a demand for enhanced internal networking, companies are increasingly recognizing the power of social media to connect with a younger generation of employees who are accustomed to using social media in their personal

lives (Davis, 2009). “Social technologies have the potential to free up expertise trapped in departmental silos” (Holmes, 2012a, para 6). With the pervasiveness of social media elsewhere in society, companies are adopting these tools for professional communication (Kelleher, 2011). Several scholarly studies have demonstrated the benefits of social media and two-way communication on employee behavior and perceptions (Jo & Kim, 2003; Ki & Hon, 2007; Ni, 2007).

There appears to be a gradual yet steady push to bring Web 2.0’s participatory media culture to the workplace (Bennett et al., 2012). This is reflected in a survey of 14,000 employees that discovered 61% of employees have access to at least one social media tool at work (Wilson, 2011a). Further evidence of such social technology awareness appears in another industry survey of employee engagement (Buck Consultants, 2009). The Bucks Consultants survey did not originally include a social media measure yet enough people wrote “social media” under the other category in a survey instrument that it was included in Buck Consultants’ final analysis of work communication. Of those who mentioned social media, four-fifths reported that they use social media frequently to engage employees and foster productivity (Buck Consultants, 2009). Despite some concerns, social media use for internal communication is “a low-cost, low-risk opportunity to experiment with new forms of media, to measure reception and ” before companies decide to use these tools to communicate with external audiences (Shaw, 2009, para 1). Microsoft, which produces one prominent intranet product, SharePoint, boasted that 20,000 new people were using SharePoint *per day* (Foley, 2011).

A logical starting point in resolving this tension in the scholarly and professional literatures—the concerns about social media’s effectiveness and the counterbalancing support for social media at work— is to look holistically at social media use in two contexts. Scholars are just starting to understand work-related social media use, work-related user-generated content production, and the factors that may influence technology-driven social networking in an

organizational context. Yet these phenomena have all been studied by human-computer interaction scholars in the context of consumers' experiences outside of the work context. Intranets have been steadily examined in the literature over the last decade (Bennett et al., 2012; Cozjin, Maes, Schackman & Ummelen, 2007; Edenius & Borgerson, 2003; Murgolo-Poore, Pitt, Berthon & Prendegast, 2003). However, there have been few comparisons of at-home and at-work social media use. Since social media and intranets rely so much on social interactions, it would be of value to examine the social processes involved in the introduction of social media into the workplace. Questions emerge from the literature about the differences between social networking for work-purposes and inefficient use of technology or "social networking," how technology use and work-related digital collaboration impact peoples' relationship with their employer, and how people learn to use technology at work.

Building on this idea, this dissertation examined how social interactions and organizational context affects peoples' decisions to use social technology at work and how this, in turn, affects employees' relationships with the company. Structuration theory from the management literature informed this study's first three research questions, which addressed employees' *expectations* for social media at work by comparing their non-work technology use with their work-related technology use, their decisions to *adopt* social media-related technology and intranet sites at work, and how they *adapt* technology for their individual work needs. Relationship management theory from public relations guided this study's fourth research question, which investigated how technology impacts employees' *relationships* with their company.

Structuration theory explains how social rules are established with organizations and how technology becomes institutionalized in the workplace (Poole & DeSanctis, 1992; Orlikowski, 1992; Yates & Orlikowski, 1992). Coworkers interact among themselves, social exchange happens, and then informal and formal social rules become accepted in the workplace. This, by

extension, can influence employees' decisions concerning how to use technology (Orlikowski, 1992). The scholarly literature should be furthered in several areas, namely with respect to understanding the processes involved in adopting technology. Several factors— including an organization's unique institutional properties, employees, and technology— impact technology adoption in organizations (Orlikowski, 1992). With intranets undergoing a shift toward greater interactivity and the addition of social technology, it is time to re-visit structuration since the structuration processes in organizations are likely changing.

Additionally, scholars need a more complete understanding of how technology and social interactions with technology impacts employees' relationships with their companies. This is critical because common business wisdom (and a major body of public relations research) holds that an organization's relationship with its stakeholders is critical for the success of the organization. Relationship management theory in public relations demonstrates how this occurs by focusing on the ways in which relationships between companies and stakeholders such as employees are managed and the effects of relationship maintenance.

Structuration theory suggests relationship maintenance in organizations is an ongoing process, which dovetails with relationship management theory. Structuration establishes the social contexts for organizational technology-use among employees, while relationship management offers readily usable and theoretically sound measures for relationship outcomes (such as perceptions of organizational commitment and satisfaction). If employees demand social media, then we might expect those employees who use this form of technology for organizational communication to have stronger commitments to their employers and more positive overall attitudes.

Structuration is suited to the study of online communities because it examines the communication medium (technological features) and how these communities are managed (Witmer, 2000). The structuration perspective holds that technologies and social systems evolve

together and technologies may have different effects on members of social systems. This study advances structuration theory and relationship management theory under a common focus of technology in organizations. Of particular interest in this dissertation is how technology influences work relationships and how employees adopt and adapt technology according to socially and organizationally appropriate rules.

Significance of the Study

This study explored the experiences of employees at one company in learning about internal media (specifically, an intranet) and the social interactions that occur in sanctioning technology use in the workplace. This study drew upon multiple sources of data, including in-depth interviews with employees, a company-wide employee survey, and company-provided intranet usage statistics. A major benefit of this study's findings is providing a comparison of employees' experiences with comparable forms of technology at work and out of work. This may help people and companies decide the most appropriate use of social technology at work. This topic is important because the line between work and non-work is blurring and work activities have increasingly crept into time that is normally spent on personal activities (Deuze, 2007).

Multiple industry reports (Bucks Consultants, 2009; Holmes 2012a & 2012b; Wilson, 2011a & 2011b) demonstrate how people seek social networking and interactive digital platforms at work. Scholars have not fully investigated the effects of this social technology use. While providing a more complete understanding of appropriate social media use at work, this study also examined and tested the influence of technology use on the employee-organization relationship. Before proceeding to the literature review, it is important to acknowledge the potential influence of my identity as a researcher. In conducting this study, I was guided by two prior personal experiences. As a scholar, I have studied user-generated content and consumers' experiences in

creating online content. This informed my interview and survey questions, as I wanted to explore the ways in which employees generate online content for work purposes. Also, during my prior professional career in public relations, I helped manage my organization's employee communication activities. I explore my researcher identity more directly in the methods chapter.

This dissertation includes a literature review, methods chapter, three chapters dealing with results (two with primarily qualitative data and one that with findings from a survey), a discussion chapter, and a concluding chapter. I elected to include tables and charts at the end of each chapter, rather than embedding in the text of the chapter or at the dissertation's conclusion.

Chapter 2-Literature Review

As computer hardware and information systems developed, standardized, and became more widely adopted in the workplace in the 1980s and 1990s, there was a wave of related scholarly research that considered technology in organizations. Two strands of research have dominated this area (Orlikowski & Scott, 2008). One area of research examines specific behavioral effects of technology use. However, this literature has tended to be overly deterministic and neglects to consider technology as both a physical object and a socially constructed phenomenon (Orlikowski & Scott, 2008). The second body of literature has generally held that technology is part of a complex process through which organizational activities are accomplished (Orlikowski & Scott, 2008). The latter perspective guides this study and looks at the role of social interactions in shaping organizational technology use.

Several important organizational studies (including ones by Fulk 1993; Poole & DeSanctis 1990; Yates & Orlikowski 1992) demonstrated that technologies and social systems evolve together and that technologies may lead to different outcomes with regard to member behavior and attitude. Building upon this idea, the nature and role of communication in organizations changes as individual employees interact with social institutions at work (Yates & Orlikowski, 1992). Social interactions at work that are mediated via technology, such as e-mail and teleconferencing can help employees understand work tasks, as well as the organization's culture, and may influence employees' long-term relationships with the company (Jones & Karsten, 2008; Scott, Corman & Cheney, 1998; Wattal, Racherla & Mandviwalla, 2009). It has been further argued, "social interaction in the workplace shapes the creation of shared meanings and that these shared definitions provide an important basis for shared patterns of media selection" (Schmitz & Faulk, 1991, p. 488). Against this backdrop, the evolution of these patterns

of social interactions is an ongoing process that occurs over time. This evolution is influenced by three important factors: The technology, a technology system user's interactions with other users, and the organization's context (Orlikowski, 1992).

An appropriate perspective for understanding the evolution of socio-technological systems is structuration theory, which was proposed by Anthony Giddens (1979, 1984) and furthered by scholars from the political economy and social scientific/empirical perspectives. Several social science scholars (DeSanctis & Poole, 1994, Fulk 1993; Orlikowski, 1992) have considered the mediating role that communication technology plays in structuration in organizations. As explained in greater depth below, structuration theory suggests that human activity is an outgrowth of and is governed by social rules that emerge in response to individual actors and social structures (Giddens, 1984). "Structuration is posited as a social process that involves the reciprocal interaction of human actors and structural features of organizations" (Orlikowski, 1992, p. 404). Structuration theory suggests that human actors in a given social system are both influenced by and influence social structures that are embedded in the unit (Giddens, 1984; Orlikowski, 1992). Agency-imbued actors draw upon structures to perform social actions in certain contexts such as work (Giddens, 1984). Structuration is also conceptualized as a series of reciprocal interactions between people and the structural features of a social unit (Orlikowski, 1992). It is recursive in that these patterns of structure develop over time and can evolve as the social systems evolve. If we view structuration as a process, then it is important to examine the most crucial points in this process. Scholars (Orlikowski, 1992; Orlikowski, Yates, Okamura, & Fujimoto, 1995; Sinclaire & Vogus, 2011) have looked at the stages involved in structuration.

The structurational model of technology has three primary components: Human agents such as technology users and managers, technology, and an organization's institutional properties such as business strategies and culture (Orlikowski, 1992). Each of these three components in this

model is part of the structuration process and each exerts different types of influences (Orlikowski, 1992). This model posits technology as the product of human action; individual actors design, appropriate, and modify technology. Additionally, technology is the medium of technology; technology facilitates certain communication activities and behaviors. This model further holds that organizational contexts influence human behavior and that there are institutional conditions for interacting with technology. The fourth area is the impact of technology on institutional contexts; actors' use of technology can change certain aspects of the organization and how the organization conducts business. This study revisited the Orlikowski (1992) model by looking at the latest wave of technology (digitally advanced corporate intranets) and a host of heretofore-unexamined organizational influences on technology adoption and adaptation. Discussed later, Orlikowski's model had to be revised in light of study findings. This chapter's focus is on explaining scholars' prior treatments of how formal and informal rules develop with respect to appropriate technology use in the workplace. This chapter also includes a review of employee communication from the public relations literature.

Technology's Shifting Context

The technological environment of this study is different from that of the early structuration studies of DeSanctis and Poole (1994), Fulk (1993), Orlikowski (1992), Yates and Orlikowski (1992), and the organizational sensemaking work of Weick (1995). Scholars attempted to understand technology that was more functional and task-focused than what current corporate intranet sites provide. Additionally, virtual communication tools that were utilized at the time of these studies were not as well developed as they are now in terms of document accessibility, ability to edit documents, and ability to exchange information in real time. Writing a decade before the explosion of Web 2.0 (which is the general term for interactive, user content-

creation software that originated around 2005), Weick (1995) argued that an issue in sense-making is the disparity between the speed and complexity of information technology and the ability of humans to comprehend technology outputs. As technology evolves, so too does our understanding of its effects in organizational contexts and its benefits.

For example, e-mail was once touted for its ability to engage in quick, nearly synchronous communication. Yates and Orlikowski (1992) examined e-mail as a then new communication medium and found that it “allows rapid asynchronous exchanges, both because it is usually transmitted so rapidly and because intermediaries such as secretaries are usually bypassed” (p. 317). Although email has had a significant place in business in the last two decades, its asynchronous, social cue-devoid qualities are limiting compared to the more recently developed set of internal social media platforms (Holmes, 2012a). E-mail use in organizations has decreased in recent years and extensive e-mail use has been found to actually hurt productivity and limit workplace collaboration (Holmes, 2012a).

Early structuration scholarship provides a sound foundation for examinations of work-related communication and technology. However, there are fundamental differences between early technological tools, such as email, and today’s highly interactive intranet platforms. Intranets have been utilized in business for around twenty years (Cortese, 1996). Yet the newest generation of intranets (what is called “Intranet 2.0”) feature social media and employee-generated content (Wilson 2011b). Company intranets are portals to information and can function and look like external Internet websites (Murgolo-Poore, Pitt & Ewing, 2002). As centralized virtual workspaces, intranets encourage the formation of online communities and employee collaboration (Edenius & Borgerson, 2003). As discussed later in this chapter, intranets enable employees to upload and edit documents in real-time, they host crucial company databases and information, and they are often where employees conduct crucial aspects of work. Recent technological enhancements to intranets afford an even greater ability for frontline (non-

management) employees to participate in organizational decision-making and to engage in social exchange within organizations (Holmes, 2012 a & b). The focus of this dissertation is intranets and the introduction of social media to augment the knowledge management capabilities that intranets offer. Recent attempts have been made to re-contextualize structuration theory in light of the complexities of social media (Sinclair & Vogus, 2011; Webster, 2011) but more work is needed.

Intranets and Interactivity in the Workplace

Several of aspects of social media and Web 2.0—including interactivity and agency—are associated with intranets. Before proceeding to a discussion of social media, it is first important to elaborate on the primary focus of this study, intranets. The intranet is the digital and information technology infrastructure supports and hosts social media. Murgolo-Poore, Pitt and Ewing (2002, p. 115) defined an intranet as “the principles and protocols of the Internet applied to a private network which enables people within organizations to communicate.” Intranets feature news, job and task instructions, communication facilities, and other organizational information for employees (Cozijn, Maes, Schackman & Ummelen, 2007). Intranets permit the dissemination of internal announcements to employees that may not be relevant to external stakeholders and are usually home to proprietary corporate information. Reflecting the recent trend toward interactivity, one expert argued that intranets “are now highly complex digital work spaces, constantly accumulating content, people, collaboration and services while even on the consumer side, the most notable websites are focused on a small number of specific tasks done repeatedly” (Miller, 2013, para. 4).

Centralized corporate information such as phone books, employee birthdays, and photos tend to occupy most corporate intranet sites (Cozijn et al). Perhaps recognizing that these sites

would soon feature a greater number of interactive affordances, Cozijn et al. indicate that intranets “can be exploited more effectively when they manage to become the coordinating and monitoring point for basic tasks to be performed daily by individuals and teams at all levels of the organization” (p. 204). Intranets are tools for knowledge management in organizations. Few scholars have investigated the antecedents of intranet use in organizations (Masrek & Jusoff, 2009). Likewise, research has barely addressed the effects of intranet use.

Although not focused on structuration, Edenius and Borgerson (2003) make several claims about intranets that involve social norms and processes. Drawing on in-depth interviews of employees at a small company in Sweden, they concluded that the corporate intranet is an active, always-changing venue that both creates and supports an organization’s culture. In the course of their daily work activities, employees continuously upload and update documents. In order for an intranet to be successful, someone in the organization must be responsible for administrating and putting information onto the portal (Edenius & Borgerson, 2003). In addition, “the information structure in an intranet should enhance task performance by enabling users to locate relevant information quickly and efficiently” (Cozijn et al., 2007, p. 207). The latter point might be called into question in light of a study by Child and Shumate (2004), which found that employees’ use of an intranet did not help enhance individual team members’ perceptions of their work group’s effectiveness. Other research has shown that three factors—organizational influence, technology, and individual employee differences—impact the perceived effectiveness of an intranet in an organization (Masrek, Karim & Hussein, 2007). Additionally, information technology flexibility and the capability of an organization’s IT staff to respond to environmental changes is also linked to positive perceptions of intranets (Masrek & Jusoff, 2009).

Just as *external* Internet sites and platforms have become more user-focused and have added functionalities that enable the creation of user-generated content, companies have increasingly sought to enhance employee contributions of *internal* web content and to increase

employee engagement and interaction with intranet sites (Wattal et al., 2009; Wilson, 2011b). In the workplace, “there is a general belief that blogs in combination with other social computing tools can be the catalyst to help create a true learning organization characterized by collaboration and sharing, and collective knowledge creation and assimilation” (Wattal et al., 2009, p. 1). This view received support from Sinickas (2005), who analyzed the results of surveys of employees at 21 companies that were conducted between 1997 and 2004. As more electronic communication choices become available in the workplace, employee preference for electronic channels increases (Sinickas, 2005).

Social technology is changing business thinking (Bednarz, 2011; Sinclair & Vogus, 2011). There is pressure for organizations to deploy interactive technologies to engage with employees and other stakeholders (Bednarz, 2011; Holmes 2012a, 2012b). Once implemented by an organization, social technologies such as blogs and internal chat programs can lead to a flattening of organizational hierarchies by increasing the amount of shared decision-making. “The social nature of decision-making has increased with impressive strength, connecting generations of professionals to each other—changing the dynamics of customer relationship management, marketing, and communications” (Bulmer & DiMauro, 2009, p. 93). Stated another way, “Internet communication technologies empower employees and contribute to the democratization of the workplace” (De Bussy, Ewing & Pitt, 2003, p. 157). This happens when frontline employees are afforded new ways to communicate directly with their managers, offer comments concerning work documents and processes, and gain access to a greater amount of corporate documents.

Building upon this discussion, social media are a group of Internet-based applications that build on the ideological and technological foundations of the Web 2.0 movement and allow the creation and exchange of user-generated content (Kaplan & Haenlein, 2010). Such media require certain functionalities that allow people to upload content and easily share material,

including Adobe Flash (which is a tool for adding animation to websites), Really Simple Syndication (which is a group of web feed formats used to publish frequently updated content such as blog entries or news headlines), and AJAX or Asynchronous Java Script (which is a technique to retrieve data from web servers and that allows the updating of content without interfering with the display and behavior of the web page) (Kaplan & Haenlein, 2010). These are programming tools that may be unobserved from the user's regular experience.

Web 2.0 builds on this technology. A major aspect of Web 2.0 is the development of social networking sites or SNSs. boyd and Ellison (2007) hold that SNSs are

web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. (p. 211)

Social networking sites often require users to keep some amount of personal information in a publicly (or at least network) accessible place; the sites also typically enable users to leave messages on their friends' profiles (boyd & Ellison, 2007). These sites foster a perceived sense of social presence that encourages people to feel both self-involved (narcissistic) and agentic (Buffardi & Campbell, 2008).

Web 2.0 and Intranet 2.0 are not just about task completion. Instead, these advanced technologies involve collaboration and companies and employees benefitting from positive computer-mediated social interactions. Although industry experts such as Wilson (2011a, 2011b) and Holmes (2012a, 2012b) have observed that social media can improve employee relationships with companies, we have little scholarly evidence of how this occurs. Interestingly, the tide is turning so quickly toward advanced interactive technologies it was argued the introduction of social networking into the workplace will soon bring the "death of the intranet" (Bennett, Owers, Pitt & Tucker, 2010, p. 141). Bennett et al. further note that:

Intranets, which are largely the norm in many companies at present will increasingly be viewed as an outmoded technology, unable to accommodate the requirements of the modern worker. At best, intranets are updated daily but in today's world where work-based projects can change by the hour or even minute, control of information should be made available for everyone and should be updated every second, if required. (p. 141)

In summarizing several research areas, Bennett et al. (2010) express optimism about the introduction of social technology. Bennett et al.'s views that social networking tools can revitalize information management and collaboration in organizations are warranted. However, claims about the intranet's pending demise are dubious. Still, intranets appear to be undergoing a transition and social media is helping drive this change. These ideas need to be explored more fully, particularly when it comes to socially sanctioned and patterned intranet use.

This dissertation considers employees' attitudes toward social media in the workplace by first comparing their at-home technology use with their at-work technology use. Communication researchers have not done enough to explore the potential overlaps or discrepancies between consumers' experiences with interactive digital platforms and employees' experiences with interactive digital platforms. For example, while Kioussis (2002) made a significant theoretical contribution with his explication of interactivity, he did not explicitly address interactivity from an organizational context. Conversely, Poole and DeSanctis' (1990) discussion of adaptive structuration theory and Orlikowski's (1992) structurational model of technology focused on technology use only within the organizational context without much reference to potential individual differences, expectations, or at-home technology use. Quite simply, there are not often holistic considerations of people as media users in these two contexts.

In a more recent treatment of structuration theory, Webster (2011) concluded that given a new found ability for consumers to access digital technologies, structuration processes could be different for at-work and leisurely activities. Additionally, Kelleher (2009) studied perceptions of Microsoft blogs; his survey sample included both Microsoft employees and regular Internet consumers who visited the blogs. Kelleher's study of organizational blogs briefly mentioned that

social media are making the distinction between external and internal organizational communication harder to detect, yet this discussion was not the main focus of the article. If we listen to contemporary business wisdom, which emphasizes the idea that employees who use comparable interactive tools in their personal lives should have desire “Intranet 2.0,” then a natural extension is to compare work-related and non-work related social networking. Such a comparison will help scholars understand individual differences in each context and additional insight into peoples’ information-seeking preferences.

Related to this, it appears the distinctions between our personal and professional lives are blurring in today’s networked economy. “[F]acilitated by advancements in information and communication technologies ... work and leisure can increasingly be seen as extensions of each other” (Deuze, 2007, p. 30). This merging of work and play is driven by technology on several levels, namely the introduction of new media tools for consumer consumption and such a widespread adoption of digital tools by companies that an expectation for employees is they remain constantly connected to work. Including work tasks and personal use of technology, the average U.S. adult consumed more than 11 hours of media each day in 2011 (EMarketer.com, 2012). Deuze (2007) holds that this mixed media life—lived in “personal information spaces” — leads to confusion. The divisions among various aspects of our lives, such as work and home, have lost their meaning as technology has become so pervasive in our daily lives. While neuroscientists are only now beginning to document the physical effects of this constant exposure to media on our brains (Richtel, 2010), communications scholars should further explore the mixed environment (work and leisure) context of this saturated media experience.

Deuze is not alone in his viewpoints concerning the modern convergence culture (Chon et al., 2003; Erdal, 2011; Jenkins, 2006; Webster, 2011), yet he is one of the only communication scholars to explicitly argue that the division between work and non-work is shrinking amid our growing reliance on technology. More research should consider the role that digital media play in

the merging of our work and non-work identities and how technology affects our relationships. This study sought to examine the relationship between employees' use of social media at home and their use of social media at work. Such a study can expand the structuration literature because it closely examines employees' preconceived notions about social media and how these ideas shape their use of social technology at work. Contrasting these two usage patterns demonstrated the structuration process from the employee's perspective and more concretely demonstrated how a person's expectations are a predictor of work technology use. The following research question draws upon qualitative interview data:

RQ1- How does social media and technology use differ from employees' personal lives and work lives?

Advancing Structuration Theory

Structuration theory entails three primary features: Structure, system, and duality of structure (Giddens, 1984). Structure refers to structuring properties that allow the "binding" of time and space in social systems and the properties that make it possible to observe similar social practice exist across varying spans of time and space that lend them "systemic" form. Giddens further suggests "the rules of social life [are] techniques or generalizable procedures applied in the enactment/ reproduction of social practices" (p. 21). Structure, then, is a recursive set of rules and resources that is influenced by actors, domination, and legitimation in a social context. In this approach, agents have knowledge and the ability to create knowledge. This agency cannot exist without considering structure. Building upon Giddens's original thoughts, Witmer (2000) suggests agents and structure exist as a duality. With this duality, "[W]e draw on structures to produce action, and those actions at the same time reinforce the structures upon which they are based" (p. 64). At work, structures and rules shape the action taken by people who belong to the

organization. Although individual agency is a major aspect of structuration, scholars working in this area have focused to such extent on the duality of structure that they have overlooked individuals as discrete entities with stable characteristics (Orlikowski & Scott, 2008).

Scholars have examined structuration processes in numerous ways, with research and theorizing emphasizing and de-emphasizing certain aspects of the theory on the basis of their interests and backgrounds (Corman & Poole, 2000). This work shows numerous ways of examining the applicability structuration theory to different social and work contexts. Giddens (1984) is often cited by critical and political economy scholars who embrace structuration theory's link between micro-level (agency-imbued) human actor behaviors, and society's broader cultural and economic powers that dominate human activity. An emerging body of literature also views structuration as a means to help explain human action at work and group communication.

An extension of structuration theory that is highly relevant to this discussion is Poole and DeSanctis's (1990) adaptive structuration theory, or AST. Poole and DeSanctis offer AST as a means of explaining group communication in a digital environment. Technology is particularly helpful in organizations when it facilitates group communication and group interaction. Communication technology assists with group decision support systems (GDSSs) that combine communication, computer, and decision technologies to support decision-making and related activities in work groups. "The fundamental goal of a GDSS is to support collaborative work activities such as idea creation, message exchange, project planning, document preparation, mutual product creation, and joint planning and decision making" (Poole & DeSanctis p. 174). We see in this work an early focus on using technology to increase idea-sharing among employees and groups, with Intranet 2.0 set to advance this collaboration with its development more than a decade after this initial scholarship.

GDSS tools provide rules that are used by groups and employees in the structuration process. "Structures exist only in a continuous process of structuration" (Poole & DeSanctis,

1990, p. 180). Emphasis should be on the word *process*. Structuration is ongoing and is subject to influence from a variety of sources. Structuration involves communication between two parties and therefore an implied relationship between these two parties. An important but understudied aspect of structuration theory is the interpersonal relationship qualities that influence structures. If rules are byproducts of social interaction and rule development is an ongoing process, then it is important to examine the process of relationship formation among the parties in a relationship. Several studies (Contractor & Eisenberg, 1990; Poole & DeSanctis, 1990; Sinclair and Vogus, 2011; Yates & Orlikowski, 1992) have used structuration theory to explain organizational communication and relationships. Communicative actions (or genres of organizational communication) are invoked in response to a recurrent situation (Yates & Orlikowski, 1992). This draws attention to the rhetoric of organizational communication, and does not focus on the particular medium such as e-mail. Structuration and relationship management as mediated by technology extends this schema-development beyond interpersonal communication.

Poole and DeSanctis are among the most prominent organizational structuration scholars. Their work borrows significantly from Giddens and their writing resonates with the sociologist. “Structuration can be defined as the production and reproduction of the social systems through members’ use of roles and resources in interaction” (Poole, 2003, p. 50). Poole holds that the survival of work groups depends on regular interaction among members. Furthermore, rules and social structures are the tools by which group communication occurs and structures are produced and reproduced within a given social system. Driven by interpersonal communication, each group develops its own social structures that govern behavior. We can extend this group and team-focused view of technology to communication and networking across companies. Both Witmer (2000) and Cozier and Witmer (2001) have suggested that structuration theory is an ideal entry-point for examining how new online publics are managed. “New online publics are created

through the medium, and the practitioner can now prepare and deliver messages to target publics of single individuals” (Witmer, 2000, p. 74).

Technology’s Intended Use

Viewing technology and the rule setting in technology as an ongoing process invites questions concerning how people intend to use technology. Two aspects of technological structures—spirit and structural features—influence the structuration process in organizations (DeSanctis & Poole, 1994). People can either faithfully appropriate a technology to use as it was originally intended, or they may ironically appropriate technology in ways that were not originally intended. Spirit is defined as “the general intent with regard to values and goals underlying a given set of structural features” (DeSanctis & Poole, 1994, p. 126). Additionally, spirit comprises “the general goals and philosophy that the technology promotes” (Poole & DeSanctis, 1992, p. 11).

Structuration researchers seek to understand the meanings of technology as social structures. These criteria include the design metaphor that underlies a technology system (calling something an electronic chalkboard, for example); the features the system incorporates and how they are named and presented; the technology interface; and training materials that are offered and help tools (DeSanctis & Poole, 1994). Spirit must be viewed as a normative framework that is understood by researchers who conduct interpretive readings of the technology as a philosophical text.

Related to the idea of spirit is the notion of unfaithful appropriations of technology, which can be judged by considering how employees refer to the intended use of the technology and how this use melds structures that are incompatible with each other. Examining spirit requires the researcher to observe how employees interact with the technology and an understanding of

how the organization intends the technology to be used. If a piece of technology is faithfully used when an employee first starts work with a company, it ostensibly dictates whether the employee decides to continuously use the technology or whether it is discarded or used on a limited basis. The other primary aspect of technological structuration is “the specific types of rules and resources, or capabilities, offered by the system” (DeSanctis & Poole, 1994, p. 126). This is the software or digital structure that enables employees to make sense of their work surroundings and to utilize technology for their individual ends.

Applying structuration at work, technological tools, such as e-mail, audio and visual teleconferencing equipment, and cell phones are deployed by organizations to encourage productive behavior and constrain inappropriate and unproductive behavior for the betterment of the corporate good. Employees’ activities are subject to external influences that limit what they can and cannot do. To be successful, employees must structure their work so it is appropriate for their task (Poole, 2003). Occasionally these rules are developed by group members on their own, yet groups usually borrow traditions and rules from other groups and social situations. From Poole’s perspective, structuration is influenced by group members’ personal characteristics and orientations, external factors, such as organizational control, and structural dynamics such as the relationships between various rules and resources in a given organizational setting. Poole’s focus is on group communication, yet this reasoning can be applied to the broader organizational communication context.

In this context, is it important to determine what patterns emerge in the development of technology and the ways in which people adapt to their environments. Furthermore if we consider agency and social learning combined, then “all social actors, all human beings are highly ‘learned’ in respect of knowledge which they possess and apply, in the production and reproduction of day-to-day social encounters...” (Giddens, 1984, p. 22). People employ schemes and mental formulae to negotiate their daily lives and master the particulars of social life. In this

regard, the process of daily communication among people (especially in the workplace) proves seminal to organizational performance. Our interactions through interpersonal communication and communication media help us develop the schemas that Giddens and others describe.

Structuration theory considers both the *scope* and the *role* of technology and how organizational context can be as much a predictor of several outcomes and related dependent variables as the technology itself (Orlikowski, 1992). As Orlikowski (2000) observed, “[S]tructure is here understood as the set of rules and resources instantiated in recurrent social practice” (p. 406). It is a social process involving reciprocal interactions between human actors and structural aspects of an organization. Aspects of the technology have no meaning until the technology is put to use by people and governed informally and formally by members of an organization.

Despite criticism by Jones (1999), Orlikowski’s (1992) study is important because it introduces a three-stage temporal model for the patterned use of technology in organizations. This suggests that patterns develop and shift over time. These stages include initial development of technology, institutionalized use of technology, and ongoing interaction with technology. In Orlikowski’s study, the first stage of technology use—development—involved a careful negotiation between outside sources (consultants) and a firm’s managers who deployed the technology. The consultants who assisted the company in that particular study had to recognize and adapt the technology to the company’s managers (which was influenced by organizational time and money resources). In the second stage—institutionalization—the diffusion of the tools was incremental until the technology proved sufficiently robust and usable to achieve widespread adoption. Technology has to have functionality and usability for it to gain widespread acceptance. The third stage—ongoing interaction—involved the outside consultants seeking to maintain the technology’s original use even as the company employees began using the technology for their own purposes.

This three-stage model provided the basis for a subsequent empirical study that uncovered similar patterning (Orlikowski et al., 1995). With the deployment of a new technology system, a Japanese company engaged in four deliberate, explicit and ongoing mediation activities: Establishment of the technology, reinforcement of technology and training, adjustment, and episodic change (Orlikowski et al., 1995). These four mediation activities “structured the institutional, interpretive, and technological rules and resources that users draw on when they use technology” (p. 437). As the authors note, these mediation activities were organization-sanctioned, yet they often were performed on an informal, person-to-person basis. These activities have direct behavioral outcomes: decisions by employees to use or ignore the technology.

At each stage in Orlikowski’s (1992) model, there were tensions between how the outside consultants had hoped to implement and have the technology be utilized and both managers’ and non-management employees’ behaviors. This dissertation borrowed from Orlikowski yet used a slightly different set of terms. When employees start work with a company that has already deployed a tool (what Orlikowski labeled “development” stage), they make decisions about how they should *adopt* and use the technology in the first place. From there, employees may make decisions and are influenced by multiple structuration factors to *adapt* the technology for their own use. This perspective on adaptation resonates with Orlikowski’s use of the “ongoing interaction” label.

Perlow, Gittell, and Katz (2004) addressed work-relationships from the vantage point of structuration theory. These scholars looked at communication and relationship patterns in three teams of software engineers. Patterns of interactions between engineers and managers reinforce employee relationships with organizational reward systems and these systems are influenced by a larger institutional context. Organizational fit occurs “through a process of mutual influence, where the components themselves shape the forms each other take” and “patterns of interaction

are shaped by the structures that managers and others have chosen to implement in a particular workplace” (p. 532). Put another way, structuration posits that individuals’ actions and patterns of interaction mutually reinforce each other, and are part of a mutually reinforcing relationship in the context of the organization (Perlow, et al.).

Putting attention specifically on organizational patterns of structuring and technology, Vallaster and de Chernatony (2006) suggest that structure is both the medium and outcome of the daily conduct in which work actors engage. In other words, social systems produce relationships among an organization’s members. These employees do not actually create these social systems; instead, they continuously reproduce and transform them based on an organization’s social systems. “Structuration process leads to (re)production and modification of corporate branding anchors which act as reference points for individual” behavior (p. 774). The particular qualities of the organization dictate the structuration process. Few studies have necessarily looked at social media in the context of structuration theory or AST. Sinclair and Vogus (2011) justified their incorporation of AST into a study of social media use by well-known companies with the following logic:

By its nature, social networking technology provides a continuous feedback loop that results in new sources of structure (new tasks, new styles of interacting) that support new decision processes and outcomes in a sophisticated atmosphere with few, if any restrictions. (p. 298)

Echoing a common theme in the public relations literature, Sinclair and Vogus note that social media may increase consumer power in consumer-organization relationships by increasing the level of knowledge about a company or product among consumers. Their mixed methods (content analysis, interviews, and survey) study focused on external clients. Their conclusions about AST and social media are applicable to internal clients and media: “As a result of increased use of social media by consumers, new structures (rules and functionality) of social media have emerged and the utility of the technology has changed to include organizational purposes” (p.

304). Structuration theory is ideally suited to naturalistic field studies in which the researcher can observe social processes. A “careful analysis of the structure of the technology yields information about the kinds of social interaction and outcomes that the technology is likely to promote” (DeSanctis & Poole, 1994, p. 133).

In summary, patterns appear to develop regarding sanctioned and unsanctioned technology use in organizations, and socio-technological systems evolve over time. Scholars see a particular channel— intranets— as dynamic and critical for the management and flow of information in organizations. Almost two decades old as a workplace productivity tool, intranets are undergoing a shift toward greater interactivity. As part of this shift, companies are introducing social media to enhance or augment intranet-mediated organizational communication. Structuration theory explains how these patterns emerge and how rules are set for appropriate technology use. The literature would benefit with an updated treatment of structure through the lens of social technology and intranets. In light of this discussion, this project addressed the the following two structuration-related research questions:

- **RQ2-** In what specific ways do social interactions among employees impact their decision to first utilize corporate intranet sites and related internal social media?
- **RQ3-** In what specific ways do social interactions among employees impact their decisions to continue using corporate intranet sites and related internal social media over time?

Organizational Communication with Stakeholders

As the previous review of related scholarship shows, scholars often examine structuration from the perspective of group/work team communication. Another common organizational communication perspective considers how organizations and managers communicate with

employees outside of the group/work team context. According to relationship management theory, communication is viewed as a means for developing, maintaining, and improving the relationship between an organization and stakeholders, such as employees and customers (Broom, Casey, & Richie 1997/2000).

If we conceptualize structuration as a process by which a series of patterns that develop over time in organizations, then we can see the structuration and public relations literatures begin to merge. Public relations, as an aspect of organizational life, is useful when public relation professionals help organizations manage relationships in both open and closed systems (Grunig & Grunig, 1992). The structure of a system is often defined by the types of relationships between the units that comprise it (Broom et al., 1997/2000). A system is a product of its organizational units and the relationships that develop within and between organizational units. Systems theory suggests that communication is a major determinant of relationships and overall success of a system (Broom et al., 1997/2000). In many ways, public relation theory is predicated on the notion that a “system is a set of interacting units that endures through time within an established boundary by responding and adjusting to change pressures from the environment to achieve and maintain goal states” (Cutlip, Center & Broom, 1985, p. 184). Relationship management theory is also heavily influenced by the interpersonal communication literature.

Guided by Stafford and Canary’s (1991) claim that relationship maintenance is a constant phenomenon with shifting patterns of escalation and de-escalation and changing effects on relationship member, relationship management theory looks at how companies manage their relationships with both internal and external stakeholders. This perspective considers the ongoing exchange of needs, expectations, and fulfillment between the organization and stakeholder groups. These relationships can change over time as the needs of participants evolve (Ledingham, 2003). The relationship-grounded research paradigm specifically investigates “[w]hat types and process of management are most effective in identifying and focusing on the common interests

and shared goals of organizations and publics, over time, to generate mutual understanding and benefit” (Ledingham, 2003, p. 193). This field has been influenced by a seminal study by Ferguson (1984), who was the first public relations scholar to take the position that theorizing and research in the field should focus on relationships. Extending beyond the academic realm, the public relations industry as a set of professional practices is focused on relationships: “The proper term for the desired outcomes of public relations practice is public relationships. An organization with effective public relations will attain positive public relationship” (Center & Jackson, 1995, p. 2).

In incorporating systems and interpersonal relational perspectives, Broom et al. (1997/2000) made a significant theoretical advancement with respect to organizations and stakeholders as they offered a new conceptualization of the organization-public relationship, or the OPR. The OPR consists of three elements: Antecedents, communication, and outcomes/consequences. Antecedents include to relationships include “the perceptions, motives, needs, behaviors, and so forth that are posited as contingencies or causes in the formation of relationships” (Broom et al., 1997, p. 94). Relationship consequences include behavioral and attitudinal outcomes that are the result of an organization’s communication with stakeholders. Additionally, “[r]elationships are the dynamic results of the exchanges and reciprocity that manifest themselves as the relationships develop and evolve, but they can be described at a given point in time” (Broom et al., 1997, p. 95). In the last two decades, the OPR model has been variously tested, examined, and discussed in numerous public relation studies and essays (Botan & Taylor, 2004; Cho & Huh, 2010; Kelleher, 2009; Kelleher & Miller, 2006; Ledingham & Bruning, 1998; Sweetser, 2010).

Employee-Organization Relationships

An extension of the OPR that is most relevant to this study is the employee-organization relationship (EOR). Specifically, of primary interest is the ways in which technology influences internal communication and the EOR. The public relations literature, as influenced by systems theory, tends to view internal communication as a strategic organizational aim. “Internal communications ... helps organizations define their goals, values, and strategic constituencies” (Grunig, 1992, p. 532). Expanding upon this, Berger (2008) suggested that:

Internal communication is critical for organizations because it provides employees with important information about their jobs, organization, environment and each other. Communication can help motivate, build trust, create shared identity and spur engagement; it provides a way for individuals to express emotions, share hopes and ambitions and celebrate and remember accomplishments. (Para 9)

Problematically, the phrase “internal communication” has suffered from a lack of consensus about its meaning (Welch & Jackson, 2007). However, four main dimensions appear consistently in the pertinent literature: Internal line manager communication, internal team peer communication, internal project peer communication, and internal corporate communication (Welch & Jackson, 2007). The fourth dimension- internal corporate communication- describes the relationship between organization and internal stakeholders. Internal corporate communication is “defined as communication between an organisation’s [sic] strategic managers and its internal stakeholders, designed to promote commitment to the organisation, a sense of belonging to it, awareness of its changing environment and understanding of its evolving aims” (p. 186).

Internal communication also includes employee participation in communication, the direction of communication (one or two-way), and communication content. In this conceptualization, emphasis is placed on horizontal communication and employees communicating with each other. We see in this perspective on two-way public relations a

comparable degree of interconnectedness and socializing as is prevalent in the human-computer interaction literature about interactive technology. Although Welch and Jackson (2007) do not reference user-generated content or social media, their definition suggests employees play an active role in a company's communication activities.

Public relations scholarship also rests upon the idea that effective organizational communication is symmetrical and that the most productive organizational-public relations relationships positively benefit both parties rather than relationships that only benefitting the organization (Hon & Grunig, 1999). Berger (2008) furthers this view regarding internal communication in noting that two-way communication provides companies with continuous feedback and this feedback is critical to learning and processing organizational change. In other words, "[o]ngoing two-way communication is the foundation for employee motivation and organizational success" (Berger, 2008, para. 56). Asymmetrical or one-sided internal communication is associated with less commitment, trust and satisfaction, whereas symmetrical internal communication is associated with communal relationships (Kim, 2007).

With the rise of new media tools, such as blogs, a host of public relations studies (Jo & Kim, 2003; Levenshus, 2010; Sweetser & Metzgar, 2007; Sweetser, 2010) have examined technology's impact on organization-public relations. Jo and Kim (2003) suggest that interactivity can enhance the mutual relationship and collaboration between a message source (which is the organization) and the receiver (various stakeholders). Sweetser (2010) conducted an experiment and found that lack of disclosure of ethical practices in a social media campaign damaged the organization-public relationship and the credibility of the organization. A qualitative study revealed that four factors will influence whether members of the public use a company's social media platforms (Hovey, 2010). As Hovey notes, these factors include the public's perceived value of online versus offline interaction, the extent to which content on social media sites holds

the public's interest, whether people are aware of the sites' existence in the first place, and the public's ability to access the sites.

Another study addressed the impact of informal "conversational human voice" on organizational blogs (Kelleher & Miller, 2006). These strategies, as demonstrated in an experiment involving blogs, were positively associated with a host of relationship outcomes, including trust and satisfaction. "Blogs are a good place to speak candidly with a conversational style ... and this conversational style may be an important part of the process of building and maintaining computer-mediated relationships" (Kelleher & Miller, p. 410). Similar findings and conclusions emerged from a study by Kelleher (2009).

A focal aspect of the OPR is outcomes and the consequences of organizational communication with stakeholders. Relational outcomes, as first advanced by Stafford and Canary (1991) and furthered by Hon and Grunig (1999), include the dimensions of trust, satisfaction, commitment, and control mutuality. These outcomes are seen in the literature as positive indicators of organizational-public relationships and "have been conceptually defined, operationally defined, tested, and discussed extensively as key variables in the study of organization-public relationships in recent public relations scholarship" (Kelleher, 2009, p. 177).

Trust refers to one party's willingness to open one's self to the other party (Hon & Grunig, 1999). Trust is also "one party's confidence that it can be open and honest with another" (Waters & Bortree, 2007, p. 58). Satisfaction is the extent to which one party feels favorable toward the other. Companies that develop satisfying relationships with selected stakeholders are likely to produce positive results for the company in the long-run (Waters & Bortree).

Commitment is the "extent to which each party believes and feels that the relationship is worth spending energy to maintain and promote" (Hon & Grunig, 1999, p. 3). And finally, control mutuality is "the degree to which parties agree on who has the rightful power to influence one another" (p. 3). Hon and Gruning further note that stable organization-public relationships

feature some sort of control of one party over the other. Waters and Bortree use the term “power balance” as Hon and Grunig use “control mutuality,” yet the phrases ultimately describe the same phenomenon.

These same four indicators often appear in the public relations literature (see, for instance, Jo & Kim, 2003; Keller, 2009; Keller & Miller, 2006; Ni, 2007; Sweetser, 2010). Adaptive structuration theory, which is a perspective that more closely examines the processes of social interaction than the OPR model, also posits that there are outcomes relating to group communication (DeSanctis & Poole, 1994). These outcomes include commitment to implementing a group’s decision on a particular issue and high group consensus. By speaking to different social processes (the OPR addresses broad-level organizational communication while AST addresses small group communication that is task-oriented), these two models share the common perspective that effective work-related communication can have positive behavioral and attitudinal effects on users and thus benefit the entire organization. A final research questions was posed in light of the preceding discussion:

- **RQ4-** How does internal social media use and intranet site use impact employees’ relationships with their employer?

Summary of the Study

This project had two phases: In-depth interviews to understand structuration at work and to understand how organizational rules are established for technology use and a follow-up survey of a company’s employees based on initial interview findings. Qualitative data with the first three research questions were appropriate for several reasons. Structuration theory has had limited application in the literature when it comes to recent technological platforms. As Orlikowski (1992) and Witmer (2000) have observed, studying structuration theory is challenging because

empirical findings have been muddled. This study helped to clarify the literature by investigating the role of individual expectations in structuration and the most important social and organizational factors in helping people decide to use technology. Qualitative interview data ostensibly would help resolve some of these empirical issues by offering a clearer understanding of employees' experiences with technology. The fourth research question examined the effects of social media on employee attitudes (specifically relationship outcomes). The final research question considers the relationship between internal social media use and employees' relationships with their company.

Chapter 3-Research Methodology

This chapter discusses the design of the study and its execution, and analysis of both qualitative and quantitative data. The project's first phase featured interviews with frontline employees (N=23). The project's second phase featured a company-wide survey (N=72). In both phases, the units of analysis were the individual employee's experiences with technology, and employees' attitudes about technology and work-related technology socialization.

This chapter also describes the process of designing and executing a multi-method structuration case study. Cases are studies of a "specific, unique bounded system" in which the researcher thoroughly describes a particular phenomenon or system (Stake, 2005, p. 237). Cases are recommended when little is known about a phenomenon, current perspectives are inadequate because they have little empirical substantiation, or when theoretical perspectives conflict with each other or common sense (Eisenhardt, 1989). There is overlap between case studies in this context and grounded theory. Grounded theory works well in organizational studies because it is suited to capturing the complexities of human behavior and interaction, links theory to professional practice, and supports theorizing in underexplored areas (Locke, 2001).

This chapter presents an overview of how this study was conducted and how data were collected; a review of the company that was studied (including a short description of the company's information systems and intranet); details of how the study's multiple types of data were analyzed and merged into a single case study; and a brief reflection on my identity as a researcher.

Study Overview

Answering this study's four research questions required a two-phase study of a company that is identified as "MaxPort." In-depth interviews were conducted with 26 employees from June to September 2012. Interviewees included two executives and an information technology specialist who initially provided background information about the company and MaxPort's intranet, and 23 frontline employees who discussed their experiences with technology. Only the 23 employee interviews were transcribed and analyzed. Including researcher memos that were embedded in document files, interviews generated 160,800 words on 300 single-spaced pages. Interview data were stored on a password protected Macintosh laptop.

A survey of the entire company was conducted in November and December 2012. The survey included questions calling for demographic information, at-home and at-work technology use, and respondents' perceptions of four relationship maintenance indicators that frequently appear in the public relations literature (trust, satisfaction, control mutuality, and commitment). Qualitative data were analyzed as interviews were transcribed in the fall of 2012 and again in the spring of 2013; quantitative data were analyzed and data triangulation occurred in the spring of 2013.

Research Site and Study Procedures

In October 2011, a two-tiered strategy was used to locate a research site. The strategy included contacting companies directly to see if they used internal social media, and several public relations agencies were asked to identify a client on my behalf. The second strategy was ineffective; no public relations agency offered client information. Eventually, seven companies were contacted that met three criteria. I sought to a company with a minimum of 200 employees

(for my survey sample) that was located in the Northeast to facilitate site visits; ideally the company would also have some sort of technology component to their business. The latter point was a requirement because it was important to find a company that would conceivably be forward thinking enough to use interactive technology or social media for employee communication. Most companies did not respond to my requests. However, MaxPort expressed initial interest in February 2012 and with my dissertation adviser's approval, they were formally invited to participate in the study. Pennsylvania State University's Institutional Review Board reviewed and approved the study procedures and protocols.

MaxPort is a company located in the northeastern United States with approximately 300 employees. Most work at MaxPort's U.S. headquarters, although about 10 percent of the company's employees work in several international offices in various roles. The company has annual sales of greater than \$20 million, which is generated through selling multiple services and products in the technology sector. As a condition of MaxPort's granting me research access, I signed a non-disclosure agreement that precludes me from revealing proprietary information. I further agreed to mask the company's identity in my final report and in subsequent journal articles. A MaxPort manager, Jennifer, served as a liaison between myself and company executives who approved the company's participation in my study. MaxPort officials reviewed their company's description in this dissertation and Jennifer was apprised of my data to ensure I was in compliance with the non-disclosure agreement. In exchange for granting me research access, MaxPort also requested that I share de-identified study results and offer my insight on intranet use and performance to the organization.

In the summer of 2012, visits to MaxPort's main U.S. office were conducted for the majority of interviews. It was not uncommon for me to arrive at the MaxPort site and to have an interviewee make a comment about my last interview subject and my last visit to the office. Employees regularly use SharePoint to monitor the comings and goings of visitors to the main

MaxPort facility, and staff often noted my arrival on campus. During several interviews employees logged into SharePoint to demonstrate how they used the intranet. This allowed me to see how they would check their peers' profiles and work schedules and a sub-site on the portal for the company's social activities. Interviewees were assigned a fake name to help ensure confidentiality.

Multiple one-on-one interviews were conducted during each visit; they usually occurred in a conference room. Interviews were conducted with four international employees by telephone. MaxPort is well known in the company's respective industry for being employee-friendly, and my own observations support this idea. On one particular visit for example, I arrived at midday and saw two people whom I had interviewed weeks before doing a fitness exercise outside of the building. Although it may seem counterintuitive from a productivity standpoint for employees to take time during the middle of the day to jog, MaxPort promotes wellness with employees and midday fitness breaks are encouraged. This observation, along with several other observations that were made during the on-site interviews, provided further evidence for several of the conclusions about MaxPort's organizational context that are drawn in chapters 4 and 5.

Jennifer administered the survey by posting two items to the company's SharePoint news site in November and December 2012; the posts asked employees to voluntarily participate in the study on my behalf. The survey was designed in the web program SurveyMonkey, which allows users to create customized survey instruments and stores survey data at an encrypted and password-protected website.

Research Organization's Information Systems

MaxPort uses Microsoft's SharePoint portal, which fits with a dominant industry trend. In an industry study of internal social media, Wilson (2011a) found that Microsoft dominates the

enterprise collaboration or intranet 2.0 market, as 55% of those companies with intranet 2.0 tools use SharePoint. Most companies with SharePoint use it as a web portal for their intranet, and the program has proven to be an effective platform for wikis, blogs, and third-party plug-ins that work with the system (Wilson, 2011a). Although some companies use free software programs such as Facebook and WordPress, SharePoint is a leading provider of web portal, intranet, and internal media services. SharePoint is a document storage and management system that has tools that enables users to collaborate and easily share information (Microsoft, n.d.). Microsoft notes that the platform makes it easy to store, update, and share important business content.

After previously relying on local servers, MaxPort adopted SharePoint in 2005 and has upgraded SharePoint several times over the years. According to Jennifer, the portal is the company's "go-to place" for project collaboration and company news. Net-Source is the company's label for the SharePoint application the company has adapted. It is the company's primary communication channel and company-wide e-mails are only sent if there is an emergency or if Net-Source is down, according to Jennifer. The intranet stores hundreds of corporate documents at 56 primary webpages and dozens of subpages. MaxPort tested SharePoint in 2003 and then officially adopted an early version of it in 2005. Users access SharePoint/Net-Source through a regular web browser such as Internet Explorer. A series of main tabs stretch across the intranet's homepage, with links to a variety of key areas such as employee resources. In the center of the main page is a list of corporate news updates, events about company events, and reminders. As discussed later, a frequently used feature of the SharePoint/Net-Source intranet is the company's social site, "Social-Source"; this sub-site appears in both the upper navigation tabs and in the center of the intranet homepage. The company also uses several blogs, as well as various word processing and database tools that, depending on their use, can interface directly with the intranet.

Although not a major discussion point in this dissertation, one final note about labeling is offered. Interviewees used both “SharePoint” and “Net-Source” as the identifier for the MaxPort intranet. Several respondents described “Net-Source” as the MaxPort-modified or MaxPort version of the intranet where employees learn about the company when they are first hired and where MaxPort’s culture is manifested; these employees consider “SharePoint” to be the formal intranet infrastructure. The majority of interviewees did not make such a distinction and used these labels interchangeably. However, this points to a potential formal/informal labeling that resonates with structuration scholarship.

Mixed Methods Measures and Data Analysis

This section describes the process of analyzing the qualitative and quantitative data. This section also includes a description of the quantitative measures used in my survey and the questions used in interviews. Reliability and validity checks for both types of data are included at the end of this section.

Qualitative Data

Guided by Orlikowski (1992), Orlikowski et al. (1995), and DeSanctis and Poole (1994), I developed an interview schedule that examined the use and adoption of internal technology at MaxPort by 23 frontline employees (see Appendix A). Structuration scholars distinguish between two key technological structures, spirit and structural features. The first three interviews with two executives and an information technology specialist helped explain the “spirit” or context of SharePoint’s use in MaxPort. Specifically, these three interviewees addressed the company’s

history, management approach, and technology capabilities. While these interviews were helpful, analysis focused on the interviews with 23 frontline employees to address internal networking and collaboration from the employee's perspective.

Interviews were initially open-ended, as the goal was to broadly understand MaxPort's corporate culture and perceptions of technology. As interviews progressed, the interviews shifted to semi-structured (focused) discussions and questions increasingly followed up on points raised by prior interviewees. This supports the classic view on interviewing that "each conversation is unique, as researchers match their questions to what each interviewee knows and is willing to share" (Rubin & Rubin, 2005, p. 4). With the initial data, I sharpened my questions and asked late-stage interviewees for their opinions about previously discussed issues. For example, a question posed to later stage interviewees would begin, 'I have heard from several of your peers that [belief/ observation/ idea]. Is this in line with what you think?' As discussed later, this strategy was a form of respondent validation that helped with qualitative reliability checks (Maxwell, 2005).

As a type of research methodology, interviews can be classified according to their function and scope. Interviews for this study fell into two categories in Rubin and Rubin's (2005) taxonomy: Concept clarification and organizational culture. I sought to understand two structuration-related concepts, adoption (of technology) and adaptation (of technology). These two terms served as the foundation of subsequent coding and data analysis. Additionally, in conducting this research as an organizational-culture study, I honed "in on a particular organization ... to figure out rules of organizational behavior that are taken for granted from stories, shared metaphors, and lessons taught to new members" (p. 8).

The interviews ended once theoretical saturation was reached. Grounded theorists traditionally use the phrase "theoretical saturation," whereas Dey (1999) suggested a more appropriate term of "suggestive" saturation. The grounded theory approach involves the coding of

concepts and categories as an ongoing exercise during a study (as discussed in the next section). Suggestive saturation is more tentative and assumes the researcher has reached a comfortable middle state in the coding process (Dey, 1999). In both theoretical saturation and suggestive saturation, the researcher stops data collection when they feel the data can no longer generate new ideas. To some degree, it is the researcher's decision to stop collecting data based on coding and their own sense of a study's progress (Dey, 1999). Two factors enabled me to reach this point. About halfway through interviews, I began to notice several dominant and consistently voiced attitudes about technology at MaxPort, namely that technology is perceived as a means of complementing ongoing project communication that is primarily face-to-face. Additionally, employees frequently commented about the relaxed nature of work at MaxPort factoring into technology use. Although expressed differently by respondents, it took about 12 to 15 interviews for these attitudes to solidify.

While I had not reached a point in which I knew the exact nature of technology use and organizational context at MaxPort, I understood that some relationship existed between these two concepts. The latter half of the interviews fully explored this relationship and I stopped interviews once I felt I had enough data to allow me to thoroughly discuss these topics in data analysis. This is how I reached suggestive saturation. The other factor in reaching saturation occurred when I began noticing that each discussion followed the same general pattern in terms of interviewee responses. I could nearly predict what a person would or could say in response to a given question. Interviews were generating fewer and fewer 'Aha!' moments. Reflecting this, my last in-person interview was the shortest. By the time I ended the qualitative data collection, I had heard many of the same ideas raised repeatedly.

In transcribing interviews, researcher memos were embedded in Microsoft Word documents. Memos ranged from short comments about the appearance or action taken by an interviewee to longer interpretations of interviewee comments. As the interviews progressed, the

memos became longer; I increasingly added detailed data analysis to the interview files. These memos fit directly with the grounded theory approach: “memoing [is] a reflexive practice that helps researchers to articulate and conserve their sense-making about what is going on in the data” (Locke, 2001, p. 45). The grounded theory process is iterative and requires the researcher to analyze data as they are collected. Ongoing data analysis and coding, which is discussed more thoroughly below, fits with both grounded theory (Dey, 1999; Locke, 2001) and case study (Yin, 2009). As Charmaz (2006) notes, grounded theory draws on a pragmatic/interpretive perspective that involves an “imaginative understanding of the studied phenomenon” (p. 126). Rigor in coding, detailed memoing throughout data collection, and a series of member checking and data validation activities gives grounded theory a strong methodological foundation from which interpretations can be logically drawn (Charmaz, 2006; Maxwell, 2005).

Qualitative Data Analysis

Grounded theory data analysis involves three coding activities: Open coding, axial coding, and theoretical coding. Open coding is the “first basic analytical step” from which subsequent analysis follows (Dey, 1999). With open coding, the researcher closely examines phenomena and creates initial labels or codes to characterize data. Data are broken down into individual fragments, stories, and respondent experiences.

In this study, the category of “adoption” developed in open coding and describes those activities that occur when the company first hires a MaxPort employee. The category of “adaptation” refers to the process by which MaxPort employees adapt to company life and adapt technology to their own individualized work routines; adaptation also describes the degree to which the company—as perceived by employees—has adapted the SharePoint platform for its needs. Grounded theory also involves axial coding, which connects various categories and

selective coding, which involves systematically relating a core category to other categories (Strauss & Corbin, 1990, as cited in Dey, 1999).

Brief researcher memos that were embedded in each interview file and later compiled into a master notes file were crucial for data analysis. I identified 14 various keywords that were included in the memos. From these memos and keywords, I developed lower and higher order concepts that eventually emerged as concepts and categories (in this analysis categories represent structures at MaxPort, which are the foundation of my analysis). These 14 keywords either had explicitly stated links (e.g., I identified a “helper” keyword that was conceptually related to the “staff” keyword). Keywords that had direct links were merged together under a broader category/structure label. Other keywords that were rarely discussed or deemed irrelevant were utilized as discussion and evidence points but they were not higher order points. A close review of interviewed data and a series of concept maps that I made on paper and a whiteboard enabled me to draw conclusions about the data.

In this study, I identified important structures that influence and are influenced by the various adoption and adaptation processes at MaxPort. Discussed later, these structures (what a grounded theorist would label a category) include the “culture,” “problematic affordance,” “sneaker,” and “helper” structures. These structures, to varying degrees, played strong roles structuration at MaxPort.

Quantitative Data

This project’s second phase involved a survey of MaxPort employees and focused on answering the dissertation’s last research question about the impact of technology on the quality of the employee-organization relationship. The survey instrument included questions on

relationship quality, demographics, and self-reported technology use. Of MaxPort's 300 employees, 72 completed the survey for a response rate of 24%.

Relational quality outcomes

The relational quality dimensions of satisfaction, trust, commitment, and control mutuality were measured with 22 items that have been used in prior public relations research (see Appendix B). Relational quality questions from Waters and Bortree (2007) were by modified by replacing "volunteers" with "employees." These items asked respondents to indicate their opinions on 22 items using five-point Likert scales, which ranged from strongly disagree to strongly agree.

Technology use measures

Technology use was operationalized as the number of times employees had utilized the intranet for a specific type of task related to either consuming social content, creating social content, engaging in group-work activities, or engaging in individual-work activities. Employees indicated how many times in the last seven days they had they used a particular SharePoint *work* tool or engaged in a *work* activity and how many times they had used a particular SharePoint *social* tool or engaged in a *social* activity. For each activity, respondents accessed a drop down menu that allowed them to select from zero to 30 and "More than 30" times. The "More than 30" value was replaced by a value of 31 in data analysis; fewer than 20 responses in the entire data set had the More than 30 value.

In total, employees were asked about 13 technology-related activities. For example, they were asked to indicate how many times in the last seven days they had used SharePoint to

collaborate with fellow employees in their workgroups and outside of their work groups, upload various documents to SharePoint, and read and post information about social events at work. Included in the work-related activities were questions concerning MaxPort's social site, "Social-Source," which is a smaller part of the overall SharePoint site, "Net-source."

Two variables involved social use of the intranet: Consuming social intranet content (a three item scale that had high reliability) and contributing social content (a two-item measure that had high reliability). Two variables involved task use of the intranet: Individual work routines (a four item scale that had high reliability) and group work routines (a four item scale that had high reliability). The social and task-related variables were operationalized slightly different. Social use of the intranet is similar to use of social media outside of the workplace in that employees either contribute content or they consume social content. However, such a split of either consuming or creating content would have been hard to operationalize for workplace social media use. Using the intranet for work tasks does not involve a simple of split of either contributing or consuming content and instead primarily involves collaboration, coordination, and information sharing. I developed questions that pertained directly to employees' regular work routines, and building upon this interview data pointed to *individual* and *group* work routines rather than simply creating or consuming content like with the traditional model for user-generated content.

Quantitative Data Analysis

Four multiple linear regression analyses were conducted to evaluate how well technology use predicted relationship quality. Each regression included all four technology use variables (creating social content, consuming social content, engaging in group work, and engaging in individual work) regressed on each relational indicator (control mutuality, commitment, satisfaction, and trust). The level of measurement for the relational indicators was interval; the

level of measurement for technology use was ratio as respondents provided a specific numeric answer to how many times they had engaged in a certain activity.

Additionally, chi-square tests of independence were performed to examine the relationship between three intranet use variables and the four relationship quality indicators. In total, 12 chi-square tests were conducted. One variable was included in regression analyses but not the chi-square tests, contributing social content. Just four survey respondents reported creating any social content at all, and the clear majority (N=67) reported not posting any social content to the intranet.

For the chi-square tests, all continuous-level data were collapsed into several categories. The technology use measures were divided into two groups, depending on the variable. For the consuming social content variable, responses were placed into one of two categories (low or high). For the group work variable, responses were placed into one of two categories (respondents doing or not doing group work). For the individual work group variable, responses were placed into one of two categories (respondents doing or not doing individual work). These groups were all nearly equal in size. Survey respondents were placed into one of three nearly-equally sized categories for each of the four relationship indicators (low, medium, high).

Quantitative survey data concerning technology use also enabled me to triangulate findings with in-depth interviews. Several survey findings are reported in the two (primarily qualitative) chapters on structuration theory. This triangulated data analysis is presented in the study's seventh chapter and demonstrates specifically how quantitative data, although not statistically significant, bolstered findings from qualitative data.

Reliability and Validity Checks

With two types of data, I engaged in several different activities to validate my findings and to rule out alternative explanations for conclusions that appear in chapters seven and eight. Qualitative and quantitative research has different ways of validity threats (Maxwell, 2005). This section presents an analysis and descriptions of how I validated and checked the reliability of data in this study.

Qualitative Data Validity Checks

Eight strategies can minimize validity threats and increase the credibility of a qualitative researcher's findings: Intensive, long-term involvement with data, getting "rich data," respondent validation, intervention, searching for negative cases and discrepant evidence, triangulation, quasi-statistics, and comparison (Maxwell, 2005). Several of these strategies are relevant to this dissertation. Structuration theory guided this study in one primary area, that structuration in organizations usually follows a temporal, linear process (Orlikowski, 1992). Reflecting the nature of this exploratory study, I focused mainly on exploring initial company/employee adoption and then company/employee adaptation of technology. The study emerged from a ground up review of the qualitative data and I was not concerned with testing hypotheses or constrained by prior theory (a point that meshes with grounded theory as argued by Dey, 1999). Grounded theory studies let data emerge from a rigorous review of the data; aside from considering structuration as a multi-step temporal process, theory did not otherwise influence coding and analysis. There was a potential tension in incorporating grounded theory into a study that looked at two distinct temporal steps, technology adoption and technology adaptation. The assumption that these two steps exist in the first place may be seen as a conflict to grounded theory's open coding and

analysis. I reconcile this tension on the grounds that theory should guide the formation of research questions, yet grounded theory scholars should engage in a constant review of data as they emerge. Grounded theory scholars naturally challenge or refine theory. In other words, it is up to scholars to be willing to admit that prior theoretical models were either wrong or vague. Orlikowski's (1992) was neither wrong nor vague. However, I add specificity in my identification of individual structures and argue that my a priori theory review was not a hindrance to my subsequent qualitative data analysis.

In respect to Maxwell's (2005) "checklist", several activities enabled me to think critically about my data as they emerged. I drew upon by qualitative and quantitative data and actively triangulated this data. For example, survey data revealed that user contribution of material to MaxPort's social intranet site was minimal to non-existent (see chapter 6). However, interviewees were often not explicit in mentioning how much content they created and nor were they explicit in quantifying the amount of intranet content they created. While interview findings were unclear in this area, survey data definitively pointed to the absence of user creation of content at MaxPort.

Other activities further enhanced validity. It would have been easy to assume that there were firm divisions among age groups with respect to social media in the workplace (see chapter 4). Yet I employed several methods to add more nuance to this simple idea and to add depth to the process of social sanctioning of technology use in the workplace (as discussed in the next chapter, there are subtle tensions about when and how much social media should be used at work). In this case, I looked for discrepant data (as I closely considered how much older employees use social media) that would counter the assumption that just younger employees would use social media. Also, I engaged in explicit comparison of key themes in chapters 4 and 5 (see tables 4-2 and 5-3 in the next two chapters, respectively). This comparison gave important definition to several of this study's most important themes.

Quantitative Data Validity Checks

This study has two sets of quantitative variables, one group for relationship outcomes (trust, control mutuality, commitment, and satisfaction) and another group for technology use (group-focused intranet work, individual-focused intranet work, consuming social content, and creating social content). I ran a series of reliability checks for each previously created relationship outcome scale. Each had high reliability: satisfaction (Cronbach's $\alpha = 0.89$); trust (Cronbach's $\alpha = 0.86$); commitment (Cronbach's $\alpha = 0.80$); and control mutuality (Cronbach's $\alpha = 0.85$). The survey initially included 22 items for these four relationship indicators. However, I dropped five of the original 22 measures from my analysis because they significantly decreased the reliability of the scales I created. Most of the dropped measures were reverse-coded items. (**Table 3-1**).

The technology use variables were developed based on interview findings. Data validation occurred in two phases. Exploratory factor analyses were conducted for four sets of technology use variables: Creating social content, consuming social content, individual work routines, group work routines. All factor analyses yielded discrete variables with Eigenvalues of greater than 1. Additionally, basic reliability checks were conducted for these four variables. The consuming social intranet content variable was a three- item scale that had high reliability (Cronbach's $\alpha = 0.79$). The contributing social content variable was a two-item scale that had satisfactory reliability (Cronbach's $\alpha = 0.67$). (**Table 3-2**). These two variables relating to social content had a different number of measures even though they addressed, essentially, the same phenomena. However, each time a third measure was included in the contributing social content scale, the reliability measure declined precipitously and one measure about contributing product information was dropped from analysis. The individual work routines variable was a four-item scale that had high reliability (Cronbach's $\alpha = 0.78$). The group work routines variable was a four-item scale that had high reliability (Cronbach's $\alpha = 0.79$).

Participant Demographics (both phases)

Twelve men and 11 women were interviewed. On average, interviewees had worked at MaxPort for 8.9 years. This sample included four employees who work in MaxPort's international offices. The average interview lasted 54 minutes and 11 seconds. Forty men and 28 women took the survey. On average survey respondents had worked at MaxPort for 7.18 years. Unfortunately, no one from MaxPort's international offices participated in the survey.

Blending Case Study and Grounded Theory

Two methodological approaches influenced this study's design. The case study approach guided the design of this dissertation on the front-end of the project. Grounded theory guided the back end of the project and the coding of qualitative data. This section explores how the two approaches can work in concert with each other and how a mixed methods study design is a sound way to bridge these two approaches.

While more than 25 definitions of the phrase "case study" have appeared in the past three decades of case study research, a simple and effective description can be found in Yin (2009), who argued that the case study is "an empirical inquiry that investigates a contemporary phenomenon in depth and with real-life context when the boundaries between phenomenon and context are not clearly defined" (p. 18). Eisenhardt (1989) and Locke (2001) explicitly, and Yin (2009) indirectly, suggested that case study serves a comparable theory-building role as the grounded theory approach. The grounded theory approach with case studies emphasizes the development of theoretical categories from evidence and an incremental (step- by- step) approach to case selection (Eisenhardt, 1989). Put another way: "Theory developed from case study research is likely to have important strengths like novelty, testability, and empirical validity,

which arise from the intimate linkage with empirical evidence” (p. 548). Case study may rely upon observation and in-depth interviews to provide this clarity and the case approach can begin to describe possible relationships that can be subsequently tested using quantitative data (Yin, 2009). A case study can, and likely should, draw upon a mix of qualitative and quantitative data. Of the particular types of cases outlined by Stake (2005), this study is an instrumental case study, which provides insight into an issue or a refinement of theory.

There has been a recent trend in the social sciences to consider the use of mixed methods, particularly within a case study research design (Azorín & Cameron, 2010; Johnson, Onwuegbuzie & Turner, 2007; Yin, 2009). Using methods from the qualitative and quantitative research paradigms enables a greater understanding of cultural artifacts and behaviors as well as the underlying cultural values and assumptions involved in social situations (Azorín & Cameron, 2010). Mixed methods is a

type of research in which a researcher ... combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration. (Johnson et al., 2007, p. 123)

Philosophically, the mixed methods approach makes use of the pragmatic method and system of knowledge generation (Johnson et al, 2007, Johnson & Onwuegbuzie, 2004). It uses induction (discovery of patterns), deduction (hypothesis testing), and abduction (relying on the best explanation for a one’s results).

Yin (2009), who is perhaps the most well known case study scholar, is measured in his sentiments about mixed methods design. On one hand, with the case approach’s inherent focus on descriptive data analysis and attention on detail, many cases already represent a mixed methods format. Yin (2009) devotes considerable attention to triangulating findings from multiple data sources. Use of multiple evidence sources is one of several ways to improve construct validity and reliability of case findings. Mixed methods cases allow researchers to address broader and

complicated research questions (Yin, 2009). Given the complicated issues of structuration and social processes, my dissertation would seem to fit this requirement.

In looking at one company—MaxPort—the dissertation had two key case study aspects: An examination of one particular group or phenomenon (technology use at MaxPort) and a naturalistic inquiry. Cases are good for answering “how” and “why” research questions—or those questions that examine the operational links between phenomenon over time rather than mere frequencies or occurrences (Yin, 2009). In that regard, the case study was appropriate for this particular dissertation as data collection occurred in two phases and considered employee technology use over time. Findings from the research concerning social interactions around technology from the structuration perspective have been muddled and I considered this, from the very start, to be an exploratory study. In considering the setting and in the types of questions I wanted to explore, the case approach seemed the right choice (**Table 3-2**). Table 3-2 includes a summary of the case’s strengths and weaknesses and a review of when case study is an appropriate methodology.

One of the perceived concerns about the case study is that it is not rigorous (Yin, 2009). With a mixed methods case design in mind, I wanted to buttress this study against those traditional concerns about the case. I therefore turned to grounded theory, which I have used in a prior study (Walden, 2013). Both the case and grounded theory are iterative and require the researcher to constantly check their data as data are collected (Dey, 1999; Yin, 2009). The case and grounded theory approaches both are “open” research methodologies and both require theory to emerge up from data. With the focus on in-depth interviews that featured very general questions (Appendix A), this study fit ideally with grounded theory and the case approach.

The focus of this study was the qualitative interviews. Interviews formed the basis of the analysis in chapters 4 and 5 and they influenced the survey questions that I address in chapter 6. The relationship between qualitative data and quantitative was not one-sided as the survey data

also strongly influenced my conclusions that I present in chapters 4 and 5. As Yin (2009) states, “The use of multiple sources of evidence ... allows an investigator to address a broader range of historical and behavioral issues” (p. 115). In using both forms of data, I was able to examine perceptions of technology (primarily through interviews), self-reported technology use behaviors (both survey and interviews), and perceptions of the company culture (both survey and interviews). In late spring 2013, I analyzed the survey data with the primary goal of exploring the relationship between technology use and the employee-organization relationship for chapter 6. At that stage of the project, I also looked at several survey questions about perceptions of technology use at-home and at-work, and how employees learn about how they can use the intranet. The former point (comparing at-home and at-work technology use) is explored in chapter 4 (a primarily qualitative chapter), while the latter point (learning about the intranet) is taken up in chapter 5 (also a qualitative chapter). I triangulated findings via these two data sources to see where interview and survey data agree and where interview and survey data diverge; this triangulation of data helped serve as a foundation for my concluding remarks in chapter 7 and enriched the overall depth of this study’s data.

Researcher Identity

The relationships that a researcher forges with their study participants are an essential part of qualitative work (Maxwell, 2005). It is important for researchers to acknowledge their identity and how it may influence their findings and related to this, this study emerges from a pragmatic paradigm that is the foundation of grounded theory (Charmaz, 2006). Pragmatism preserves an emphasis on language, meaning, and action in grounded theory (Charmaz, 2006). I also draw upon Maxwell (2005) and Reinharz (2011) for insights to help explain my research approach and to reflect on my identity. While Maxwell writes primarily about qualitative work

and Reinharz discusses intensive (active participant-type) field research, their arguments resonate with my dissertation.

This was my first organizational study and undergirding this study was an appreciation for the access that MaxPort gave me. Company liaison Jennifer worked with me over the course of the year and was quite gracious about giving me her and her company's time. Still, I was cautious. I closely followed the non-disclosure agreement and gave Jennifer time to review drafts so the company could give me an official "sign off" on some material. The next chapter focuses on MaxPort's culture and I believe a strong predictor of employees' use of technology is the very nature of MaxPort's products, but I do not explicitly describe of MaxPort's operational aspects.

My interest in social media initially drove this project. One key aspect of social media, user-generated content, has been the focus of much of my research in graduate school. Entering this study, I wanted to find how UGC was created and consumed at work. Traditional views on UGC hold that user content is a way of empowering individuals and it allows them to express creativity. Such were my thoughts going into the study. However, as data emerged and were analyzed this notion that people produce content in the work context was abandoned. Survey and interview data both revealed how employees are primarily *consumers* of content, not *creators* of content. It required several months of qualitative data analysis for me to fully develop this revised understanding of content creation in the workplace. I believe this development was complete, as my discussion in chapter 7 points toward a reconsideration of UGC at work. Related to this, the four structures that I identified in this study pertain more directly to one-way organizational communication, which, despite claims made in the industry about growing two-way communication, remains very much an important aspect of business life today.

At philosophical and ethical levels (Maxwell, 2005), my relationship between MaxPort and myself was satisfactory. While I drew on some of my prior experiences as public relations professional in designing questions for MaxPort employees about internal communication, I

quickly tailored my questions to the company's unique context. For instance, my former employer is much larger and has many more resources for internal communication than MaxPort. Early on in the interviews, my focus shifted from internal message building the way my former employee conducted to more attention to interpersonal relationships and information sharing that is common at MaxPort. Aside from completing my dissertation, I did not otherwise benefit from my relationship with MaxPort so I do not believe my relationship with company firm posed any ethical problems. Early on I conducted interviews in a dress shirt, tie, and business casual pants, which is more formal compared to most MaxPort employees. After making my first several site visits, I changed my attire to jeans and an open dress shirt to fit in. No employees appeared uncomfortable during my interviews and the relationship with the entire company was positive from my perspective. In the late spring of 2013, I prepared an executive (employee de-identified) summary for MaxPort's management.

Table 3-1. Relationship quality indicators

Variable	Measure (including items that were dropped in analysis)
Trust	<ul style="list-style-type: none"> *The company respects its employees. *The company can be relied on to keep its promises. *When the company makes important decisions, it is concerned about its employees. *I believe the company takes the opinions of employees into account when making decisions. *The company does not have the ability to meet its goals and objectives. (Reverse coded; dropped from data analysis) *I feel very confident about the company's ability to accomplish its mission. (Dropped from data analysis)
Control mutuality	<ul style="list-style-type: none"> *When employees interact with this company, they have a sense of control over the situation. *The company really listens to what its employees have to say. *The company and employees are attentive to each other's needs. *I believe employees have influence on the decision-makers of the company. *The company does not believe the opinions and concerns of its employees are important. (Reverse coded; dropped from data analysis)
Commitment	<ul style="list-style-type: none"> * I would rather have a relationship with this company than not. *Compared to other companies, I value my relationship with this company more. *There is a long-lasting bond between the company and its employees. *I feel that the company is trying to maintain a long-term commitment with its employees. *I cannot see that the company wants to maintain a relationship with its employees. (Reverse coded; dropped from data analysis)
Satisfaction	<ul style="list-style-type: none"> *Employees are happy with the company. *Both the company and its employees benefit from the relationship. *Most employees are happy with their interactions with the company. *Generally speaking, I am pleased with the relationship the company has established with me. *The company fails to satisfy the needs of its employees. (Reverse coded; dropped from data analysis) *Most employees enjoy dealing with this company.

Table 3-2. Technology use measures

Variable	Measure (All questions begin, “In the last 7 days how many times have you used...”)
Creating social content	*Social-Source to post written information of your own about a company social event. * Social-Source to post photos of your own about a company social event?
Consuming social content	*Social-Source to read written information about a company social event (e.g., blood drive, fitness class, or potluck)? *Social-Source to look at photos about a company social event? *Social-Source to read information about an item being sold or given away by a co-worker?
Engaging in group-oriented work	*Net-Source to read updates about your work group? *Net-Source to collaborate directly with members of your work group? *Net-Source to collaborate with employees who are not on your work group? *Net-Source to view the progress of fellow team members’ work projects?
Engaging in individual-oriented work	*Net-Source to update an existing work document? *Net-Source to upload an entirely new work document? *Update the progress of your work projects?

Table 3-3. Identifying key strengths and weaknesses of the case study approach

	Summary
Strengths:	
Generating new theory	<p>*Cases are holistic studies that enable the researcher to examine multiple evidence sources and sort through conflicting ideas and data.</p> <p>*In looking at totality of a concept from multiple perspectives, the researcher engages in explication and creates new understanding of a concept or phenomenon. Enables ground-up building of theory.</p>
Naturalistic examination of real phenomena	<p>*The researcher trades control of behavioral events for close study of particular phenomena.</p> <p>*When the boundaries between phenomena and context of a situation are unclear, the case enables and requires the researcher to draw these boundaries.</p> <p>*The case is not bound by a particular research method and as a situation changes, the method can change with it. Cases are also geared toward examinations of people's experiences, thus interview data can augment observed behavior changes.</p>
Weaknesses:	
Lack of rigor	<p>*Traditional criticism about cases that is addressed by the incorporation of grounded theory analytical approach.</p> <p>*A reliance on methodological exemplars and multiple literature review sources can counter this.</p>
Limited generalizability	<p>*Cases are appropriate for early-stage theory development; the researcher essentially builds a theory about specific phenomenon.</p> <p>*Incorporation of quantitative data enables theory testing and improves the systematic nature of the study.</p>

Adapted from Eisenhardt, 1989; Walden, 2011; Yin, 2009

Chapter 4- Research Question 1 Analysis

This chapter reports the findings from 23 in-depth interviews about employees' experiences with technology in their personal lives and their professional lives. This analysis revealed that employees infrequently engage in several crossover activities, such as checking work email from home and checking personal social media profiles at work. An in-depth analysis of qualitative data indicated that employees' own preferences are to keep these two areas separate from each other. Related to this is a degree of technology fatigue that was either expressed directly or raised implicitly during interviews: In working with technology during the day, employees have little desire to work from home and the introduction of social media into the workplace is questioned because of its potential to distract employees.

Understanding the MaxPort context

After conducting grounded theory coding and data analysis, I identified four structures that are crucial to understanding structuration at MaxPort. Three of these structures—the “sneaker” structure, the “problematic affordance” structure, and the “helper” structure—are discussed in the next chapter. This chapter investigates the “current culture” structure at MaxPort. Each structure involves a different type of organizational interaction as highlighted by Orlikowski's (1992) structurational model of technology (**Figure 4-1**). This study modifies Orlikowski's model by labeling individual structures and by expanding on the model's description of the various structuration influences on human agents, technology, and the organization. A major contribution of this research project, as illustrated in Figure 1, is the refined and updated analysis of organizational structuring and technology. Chapter 7 provides

additional information concerning how findings from this study expand upon Orlikowski's original model, while also integrating the four structures into a theoretical framework for organizational communication. At the start of this discussion, the current culture structure describes how employees perceive the environment at MaxPort and how these perceptions influence technology use in the dual contexts of work and home (**Table 4-1**). As demonstrated in Table 4-1, a series of interrelated factors comprise the current culture structure at MaxPort. In this table, evidence from interviewees shows how this structure is formed.

The relationship between a person's technology use in the environments of home and at work is complex, at least in the case of MaxPort employees. Established work routines and the organization's unique qualities (the "current culture" structure) provide a basis for my analysis. MaxPort has nearly doubled in size since the 1980s. At the height of a major growth period a decade ago, MaxPort moved its corporate offices into a new building, which is a sign that suggests MaxPort is overall in good financial health despite the recent economic downturn. Although the recession invoked concern among employees about the future and there was belt-tightening at the company (including stricter controls over spending and reorganizing work teams to improve efficiency), employees believe MaxPort has emerged, in recent years, stable and secure. This informs how organizational communication routines are enacted, reified, and deemed socially appropriate.

It became clear in early interviews with company executives and in subsequent interviews with frontline employees that MaxPort provides a positive, relatively stress-free work environment. This led to the identification of the study's first coded structure, the current culture structure. Terrance, who joined MaxPort five years ago and has an extensive professional background, offered several comments that reflect the dominant attitude at MaxPort. "As long as long you're doing your job, we trust that you're going to do it," Terrance said. "We're not going to micromanage everything. That allows the employee to want to give more." The company is

perceived as having a flat management structure, which encourages employees to bring new ideas to their superiors. Managers and non-managers, new hires and veterans, men and women all repeatedly raised the idea of professional autonomy.

Once MaxPort hires someone, they typically remain with the company for an extended period of time. Contributing to this limited turnover is a rigorous interview process that has prospective employees meeting their future colleagues multiple times over several days. One interviewee described the importance of the thorough screening process: “You have to have the right personality to fit in. Their interview fits in with that. Figuring out whether you fit with the department is almost as [important] as whether you can do the job.” Many employees had comparable comments about the interview’s selective process. Employees perceive a high level of trust from management.

MaxPort’s physical and time demands are manageable. Employees are located in comfortable offices, and the company emphasizes work schedules that fit with employees’ individual and family needs. Additionally, employees said salaries are competitive for their field and MaxPort offers perks such as yoga and a gym that is located near the office. “The impression is that the company wants employees to be happy,” said Randy, who has extensive professional experience with other companies. Rachel, who has had multiple jobs at the company over a decade, commented on the changes that have occurred at MaxPort over the years. Rachel has experience interfacing between MaxPort’s customers and internal teams. This position gives her a unique vantage point to discuss the company’s evolution:

It’s a great place to work. The environment is friendly; it feels like family. We have gone through some growing pains but I think we’ve come through them pretty well. It’s not going to be that same little small family, but it’s a larger family atmosphere now.

Five employees, ranging from their late 30s to their mid 50s, indicated that they intend to retire from MaxPort. “We’re all growing older together and hardly anybody leaves,” one veteran employee said. Although expressed differently, this attitude was prevalent among employees who

were in the mid to latter stages of their careers. Younger employees, while remaining non-committal about their desire to remain at MaxPort for a definitive amount of time, also noted that MaxPort provides a warm and welcoming environment. Across these age differences, this comfort with the company facilitates informal, face-to-face communication.

Rethinking the Work-Life Technology Balance

This employee-centric context (the current culture structure) sets the stage for how employees engage in daily work activities and use technology. Only six interviewees reported regularly checking e-mail and doing MaxPort work from home on a regular basis, while the other employees either indicated that they do not work from home much or they did not specifically mention it during interviews. Of those who work from home after hours, all reported little organizational pressure to do so.

MaxPort uses software that allows employees to remotely access their work computers. For Terrance, this instant access to work gives him a “sense of security that things are OK” when he is out of the office on vacation or even when he is home for the night. Similarly, Lucy said she frequently checks her work e-mail from home. Like Rachel from earlier, Lucy has been with the company for more than a decade and has seen the company grow substantially in recent years and has served a quasi-management role. According to Lucy:

You hate to leave email backup. I mean we'll come home from a trip, come back into work, anybody in this whole building and probably have hundreds of emails per day waiting. If you can just get through those quickly on your vacation, five minutes: *Delete, delete, delete, save, save, save*. You don't have to answer them but clean them up a little bit so when you come back it's not such a daunting task.

When it comes to work creeping into personal time, Terrance strives for a balance between a project's urgency and his own personal preference to not fall behind on tasks. Terrance's desire to use work technology at home comes from his individual routines and

motivation “as far as trying to get something completed just for the sake of getting it off my plate.” Lucy and Terrance have both held management positions in their careers, thus this expectation for at-home work may be influenced by their prior time-intensive jobs. Five interviewees who actively work from home help develop MaxPort’s main products, including Brian who observed that his work routines change depending on his team’s path through a production cycle. There are extended periods of time when Brian does not work from home. As a product reaches its final development stages, Brian spends more time at home on MaxPort tasks. Yet this activity is just for those, “‘Oh my God moments’ and ... even at that point it’s in the order of hours using it, not days or weeks.” Three interviewees who actively use work-technology at home belong to the same unit and likely experience similar work patterns.

Analysis of interview data revealed that employees have a preference for avoiding technology at-home, even for non-work tasks. Mirella, who has worked for the company for more than a decade, likened MaxPort employees’ use of technology to cooks who work with food all day and want to avoid cooking when they get home. In dealing with myriad technologies in the workplace, people need a break at home, according to Mirella: “When I’m done with work, I’m done. I just don’t want to look at it. I’m not on Facebook. I don’t do Twitter. I don’t even have a smartphone.” Even Rachel, who regularly works from home because of her job, avoids technology at home when possible. “When I get home, the last thing I want to deal with is any software, which is irritating [for my family] because if anything goes wrong at home it’s, ‘Hey can you fix this?’ ... ‘No, I don’t want to fix it.’”

The transition to MaxPort from other companies can be startling for new employees. Three employees—Anthony, Randy, and Lila—reported being surprised at how little they have to work from home and how little they need to use technology outside of the workplace. These three employees came from different backgrounds and range in age from their late 20s to their early 50s. Despite these differences, they share a common appreciation for MaxPort’s particular

context. Anthony's former company required him to be a "jack of all trades" and work on multiple projects at once. Yet Anthony is not pulled in as many directions at MaxPort, which reduces his need to be digitally connected to work:

I worked probably nine hours a day there [at the prior job] and got home and worked. When I was on vacation I would be checking in everyday. There's no need for me to do it here. Because when my day is done, it's done.

Whereas Anthony finds it "nice" that the environment at MaxPort is more relaxed, Lila is more direct in avoiding technology outside of work. Her prior job required her to work from 6 a.m. to 10 p.m. most days and also required her to constantly check work e-mail from home. In a much different role at MaxPort, she no longer has those pressures. During the interview, Lila was direct about maintaining a work-life technology balance: "At home, it's my non-technology time... We don't need Facebook, we don't need email. At home, I'm pretty disconnected." Lila acknowledged that the relaxed nature of work at MaxPort enables her to avoid working from home. It is one of the aspects of the job that intrigues her and fits into her stated desire of maintaining a less-demanding set of work hours. Lila's professional background is crucial in shaping how she uses technology both at work and at home.

Several factors influence employees' willingness to connect to corporate technology at home and the work-life technology balance. MaxPort's organizational pressure appears minimal and is cyclical when exerted. When a product nears final production and approval, the intensity increases and those employees who often check work e-mail from home perceive a need to remain current on product developments. When this is over, there is less pressure to use work-related media at home. This need to be connected via technology comes from employees themselves, not management. The employees who use technology at home for work do so mainly for peace of mind. They do not want to miss task-critical communication during busy times.

In summary, the culture relating to outside technology use at MaxPort is shaped by the specific job requirements (few employees have time-sensitive tasks that cannot be completed

during the regular business day), organizational characteristics, and employees' own attitudes. The company is structured in such a way that employees simply do not have to work much from home and employees appreciate this relaxed environment. Furthermore, since MaxPort is a technology company and employees use numerous digital tools during the workday, employees experience technology fatigue. It is not just work technology that employees avoid at home; personal technology is avoided as well (**Table 4-2**).

Information and Communications Technology in Two Venues

While employees perceive clear differences between at-home and at-work technology use, a close review of interview data reveals some critical overlap. MaxPort's intranet, "Net-Source," has several interactive aspects that prompted several employees to compare it to social media. MaxPort's 300 employees all use the company's intranet, "Net-Source," during the workday (**Table 4-2**). Although not a commonly voiced perspective, one employee called Net-Source "a weird hybrid between people's personal lives and work." Net-Source allows employees to keep profiles the entire company can see. Net-Source also features a sub-site with company photos and news about social events. Additionally, groups store documents and manage projects at their team sites. As discussed later, several teams use internal blogs. Table 4-2 provides an overview of the types of patterns and behaviors with respect to social media in these two venues of work and home.

The difference between at-home and at-work technology use is narrow, and this can be distinguished by activity and content. In terms of activity, there is some agreement that information consumption in the two venues is similar. For example, Anthony said he uses SharePoint at-work and social media at-home to obtain information. "The information I need at home is different than what I need here, but it's still looking for information when I use either

one,” Anthony observed. People can post personal information to the company social pages and their work profiles, according to a new hire, Julia. At the time of her interview for the study, Julia had been with the company for less than a year and was in her twenties. Although not an active user of personal social media, she expressed a high degree of familiarity with platforms such as Facebook. Like with personal social media, Net-Source serves a surveillance function in respect to people posting their daily work schedules, when they take time off, and project updates, according to Julia, who added:

Net-Source is kind of like Facebook at work. Some of the things that people post are more personal in nature and you can see what everyone is doing at the company. We don’t have status updates but you can log onto people’s pages and see if they’re busy or free or what they’re doing and then we have an internal chat system that we can use. I think there are a lot of similarities between the two. This is more professional obviously.

One employee, Isabel, insisted in an interview that the work and home technology realms are “totally different.” Yet Isabel’s perspective on the two venues is similar. In both cases, she’s “keeping people up to date” with information, either work or personal information. Although Isabel acknowledged that sometimes these two media identities crossover for the most part, she claims that, “I don’t want my colleagues to know if I go out on a Friday night and get drunk. My private is my private life and my work life is my work life.” Isabel pays close attention to the content that she posts to her private social media, and she has no co-workers as Facebook friends. What little overlap there is between these two areas makes her uncomfortable. Thus, interaction between co-workers via Facebook is limited. According to Linda, who is in her earlier 30s, Facebook is “a fun way to share family photos and vacation photos and that kind of thing. But we’re not closely watching each other on the social networking site.” Linda said it would be “Big Brother like” if people used Facebook to keep tabs on their co-workers. Employees seek to keep boundaries between personal information and their co-workers. There is a concern among employees that overly personal or sensitive information that is posted to private social media accounts will be viewed by one’s peers and therefore cause a problem at work.

One newly hired employee sees Net-Source as distinct from social media. “Really I only use Net-Source to see if there’s some emergency that I need to know about,” Marissa said.

“Searching for information at work, I don’t really use it as a social thing. I guess it’s completely separate.” However, she uses Facebook, Pinterest, LinkedIn and Instagram to support an outside personal project that consumes much of her free time. This dual perspective on social media is something that is examined more closely later in this chapter in the discussion of the third-person effect at the company. Marissa mentioned that she uses social media to connect with MaxPort colleagues:

I think I have three colleagues on my Facebook friend list and maybe two or three on Pinterest. My officemate and I will pin things and look at each other’s pins a lot. It’s cool because I get to see photos of her kids and stuff like that.

Marissa’s perspective highlights an interesting dynamic. Social media is seen as private and yet some employees (primarily heavy technology users) find social media helpful for work-related socialization.

A majority of interviewees—15 of 23— either reported having active LinkedIn accounts or have publically searchable LinkedIn profiles. Like others, Lila keeps the personal social media use at work to a minimum yet she logs into her LinkedIn account for work. “I’ll stay logged in to respond to discussions and things like that.” This perspective builds on comments from Sophie, a long-time MaxPort employee who also uses LinkedIn to connect with external clients. When traditional email does not generate a response, her LinkedIn account can be helpful. “My contacts on LinkedIn, most of them are customers,” Sophie observed. “Sometimes you write an email to a customer or try to call them and they don’t reply. If you send them a message to them via LinkedIn, they reply.” Sophie worries about her emails getting being up in her clients’ spam filters. The solution, she sees, is to communicate with her company contacts via LinkedIn “because [if] I’m a personal contact of theirs, they might take a look.” Few other employees

mentioned using LinkedIn as a supplementary communication channel with external stakeholders. Sophie's perspective is interesting because it shows how professionals rely on social media to ensure their business messages are reaching their targets.

Despite the potential for improved business communication with LinkedIn, there is a perceived lack of utility with the platform that crosses age and work roles. Julia and Marissa are both younger employees who have worked for MaxPort for fewer than three years, while Lucy has been with the company for several decades. Each person said they find little benefit from LinkedIn. Lucy said she uses it "a tiny, tiny bit but that's mostly just people requesting me. I don't really get in there." Lucy has no interest in leaving MaxPort so there is no need to cultivate active professional connections outside of the company. Randy, another long-time MaxPort employee, uses LinkedIn in a comparable manner:

There might be one or two ex-MaxPort folks you just want to reestablish contact with. That's a way to do it because you don't see them day-to-day anymore. It's partially social and I find that it isn't overwhelming like Facebook. Quite frankly there's not a huge benefit for me [with LinkedIn]. I'm to the point where I'm at MaxPort for the rest of my career.

Because LinkedIn has a professional orientation, employees have no problem joining the site, and it is an employee-sanctioned tool for external socializing on a limited basis.

The next section compares two examples of sanctioned and unsanctioned social media use. As I show in Table 4-3, blogs (as sanctioned social media) and private social media (as unsanctioned) both involve an intimate relationship with daily work activities; it is within the context of work that one form of social media is approved and the other subject to questions. The introduction of social media into the workplace is socially negotiated and, as I point out in the discussion chapters, driven by an expectation that social media enhance productivity.

Unsanctioned Social Media Use

When the distinction between work and home technology blurs, there is a resulting subtle tension that most often (but not exclusively) involves age differences. Employees were careful to not criticize each other but several older interviewees expressed either frustration or condescension toward their younger peers' social media use. Consider the perspective of a longtime MaxPort employee who has had management roles throughout their career.

We have people in this company obviously who spend more time on Facebook than others. If I were to try to correlate that, I'd think the more junior roles, for whatever reason, maybe they're not mentally stimulating or challenging enough to the people, or maybe those people are just at a stage in their lives where they're more interested in the social aspects of life than they are in say, career aspects.

This employee felt that Net-Source could host advanced social media such as microblogging platforms like Twitter or even a Facebook type program that encourages users to contribute personal content, yet "I just can't see any immediate or obvious reason why we would do it." This extends to Chuck, who has worked for MaxPort for more than a decade. Chuck observed that, "Younger people who grew up with that stuff, they'll embrace it and see really a need for the social media aspects of it. But I don't."

One social media-type function that the intranet affords and that's formally supported by the company is overlooked. Employees have the ability to customize an employee profile page with links to important work information and to post personal information. The company estimated that about eight in every 10 employees do not customize their profile pages and interview data support this limited use. Six interviewees mentioned that they were aware of the program yet they did not customize their page, while every other respondent did not discuss their profile page in their interview. Interestingly, several employees reported that they received training for this particular tool and MaxPort therefore legitimizes it. Yet it is a resource that goes unused. Marissa, who has worked for the company for just under three years, has a perspective

that was common among those employees who do not customize their profile pages: “I don’t use it. Ever. I’m not sure what it’s there for, like I don’t know what you do with it if you wanted to use it.” This analysis shows that even company-supported social media are rebuked.

I do not wish to overstate the degree of concern with personal social media use that veteran employees voiced. It was implicit and only a few people equated age with problematic social media use in the workplace. Yet this tension contributes to a third-person effect at MaxPort and that directly relates to structuration theory’s focus on rule-setting and social sanctioning of technology. As discussed later, several behaviors appear condoned by employees and this section’s focus on these subtle criticisms provides a basis for a reasonable comparison with professional social media use at MaxPort. These subtle patterns of de-legitimizing and criticism are part of the overall MaxPort culture and help explain the limited amount of user-generated content that is produced at the company’s intranet. With personal social media use being so openly questioned (in interviews) and likely among co-workers, one sees how professional-related social media have such limited application at MaxPort. In avoiding workplace tension over perceived concerns that they are wasting time at work, employees seek to keep their personal social media use discrete and hidden. This, in turn, facilitates the development of an atmosphere at MaxPort that is relatively counter to the idea of user expression. In other words, employees are discouraged from using social media (unless it is directly for work) and therefore they tend to feel reluctance about submitting social intranet content.

Numerous interviewees reported seeing people use social media for non-work purposes, yet it was hard to get a sense from employees about their own Facebook or Twitter activities during the workday. “I know that as I walk through the building I see a lot of people on Facebook and they’re not using it work-wise,” said Kara, who has been with the company for a decade. During our interview Kara pauses and carefully chooses her words: “I think there’s just, there are certain ... I don’t know what I want to say, it’s not genres but ... there are certain cliques or

groups that would probably be lost if we didn't allow it." Kara said it is "odd" seeing younger employees who recently have joined the company use Facebook and the company's internal chat program for non-work purposes rather than work-related purposes. Note the use of "odd" by this respondent. Kara is a veteran MaxPort employee who referred several times in her interview to having multiple friends at various levels in the company. Kara has a background in information technology and has taken on a midlevel management position at MaxPort. Without directly observing Kara's interactions with her peers, her comments suggest that she is a relatively well-connected employee at the company. Her use of "odd" conveys a negative attitude toward social media use, which expressed in other venues and interactions with her peers, likely contributes to the company's reluctance to embrace social media. Furthermore, her careful use of language and deliberateness suggests a desire to not appear overly critical of her peers even though she clearly dismisses the personal social media in the workplace.

While there is an age-related tension concerning problematic social media use in the workplace, the dissonance about social media use is not exclusive to older employees. Two people who are in their 20s also made points about their peers using social technology at work for non work purposes. One employee said that while she does not contribute to the social side of Net-Source "I mostly just read it so I can see what other people are doing." Interestingly, the employee said she observes people who have Facebook "on their screens all day" yet she did not specify who these people were. Additionally, Linda knows "other people" who put personal information in their Net-Source profile yet she said she rarely posts non-work content to the intranet. In many ways, the experiences of MaxPort employees and the broader company context runs counter to recent social media trends in the workplace. It appears that these de-legitimizing attitudes and behaviors toward private social media may influence employees' limited use of social media for work purposes. The company, as a whole, does not appear to solicit employee-contributed content and when employees do seek to use their personal social media, they either

are criticized directly or perceive an indirect pressure to avoid this type of technology. By extension, self-expression is both measured and contained. Employees perceive no need to express themselves with technology and user-generated content, or if they do not perceive the lack of utility for this self-expression, they perceive criticism from their peers.

Sanctioned Social Media Use

Even with this limited application of self-expression, several teams use blogs to communicate team-specific news and to share tips concerning work-related tasks. Nine respondents mentioned that they either read or they contribute to internal company blogs. These blogs represent sanctioned use of social technology in the workplace. Consider Linda, who will write a post when she completes a hard task that she knows her peers are also confronting. The post is a quick alert to her teammates when she solves the problem and critically, it is easier to search than other pieces of intranet-stored content. Blog posts are tagged at a “high level” and are easier to find in searches:

With a blog, it’s more like, ‘Hey I found this really cool thing that’s applicable across the board. I’m going to tag it in ways that will allow you to find it if you’re doing that kind of search.’ Then you can go crazy and read what you want.

Similarly, Chuck posts to his team’s blog if he finds a solution to a troublesome task that he knows his team members are also struggling with. Chuck’s team was once confronted by an esoteric yet minor problem that slowed down a project. A teammate spent several hours conducting research about the topic and wrote a lengthy internal post about it:

If I spent a day on it, trying to figure it out, that would be a waste of time. If we don't have any way to communicate that information to other [team members], we might all waste a day on it. Hopefully by him blogging it and letting everybody out there know

about it, it'll be out there, a permanent record.

The internal blog helps improve team efficiency because it has become a go-to place for troubleshooting, Chuck said. His experiences are important because they illustrate a dynamic regarding social media. 'I don't use technology at home much' and 'I'm not on Net-Source much' were common refrains in interviews. Yet blogs are, to varying degrees, effectively used in MaxPort and encouraged for the betterment of the company.

MaxPort also has an internal blog by an employee who frequently travels. Written in a reflective tone, this particular blog describes the employee's various professional trips and encounters with outside groups. This internal blog helps MaxPort plan for the future, according to Stan: "Even though most of that is stuff we wouldn't talk about outside the company it's really good to be aware of." Other examples include the MaxPort bowling team and yoga group.

According to Kara, the veteran employee with an information technology background:

The bowling team has their own page and their own blog. They bowl every Tuesday night throughout the winter. Whoever has bragging rights for the year can say, 'Oh I'm going to beat you tonight.' I know the yoga site has a blog where a lot of people put up a lot of different things about yoga, their personal experience with yoga, stuff like that.

Sharing news and photos about those activities on the company intranet helps bring employees together, according to Kara. This type of social media use is encouraged because it serves a team-building function. This supported social media use encourages employees to interact with each other, and in comparison, private social media use appears primarily involves communication with people outside of the company. Thus an in/out group dynamic is present at MaxPort: Communicating with peers through official corporate social media channels is a positive and communicating without outsiders through unofficial personal social media is not supported. Although privately expressed concerns were raised about the appropriateness of social media such as Facebook in the workplace (and subtly-conveyed concerns about its use among certain groups), blogging is perceived in a highly positive manner at MaxPort because blog

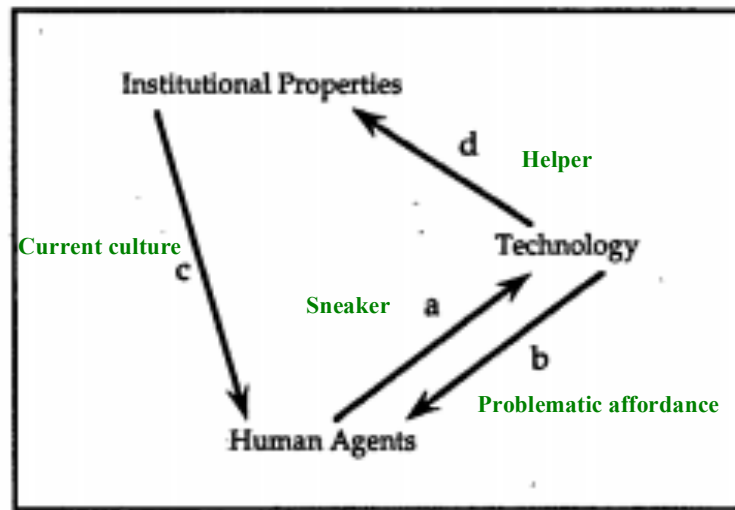
entries can improve work efficiency and help engender workplace camaraderie in a socially-acceptable manner. Related to this, blogging involves employee-to-employee communication and enhances group communication in the support of the company's overall goals and tasks. A comparison of sanctioned and unsanctioned social media at MaxPort is presented in Table 4-3.

Summary of Research Question 1 Findings

The first research question concerned the differences between at-home and at-work technology use. This activity in both contexts is shaped by MaxPort's "current culture." The company's relaxed management approach means employees believe they rarely have to check work e-mail from home or do work from home outside of normal business hours. Additionally, since this company is focused on technology and employees use an assortment of electronic tools throughout the day, employees prefer to limit their out-of-work technology use. This is a function of the company's relaxed work environment and is reified through employees' own behaviors and attitudes. Employees perceive that the company will not demand much in the way of extracurricular time commitments.

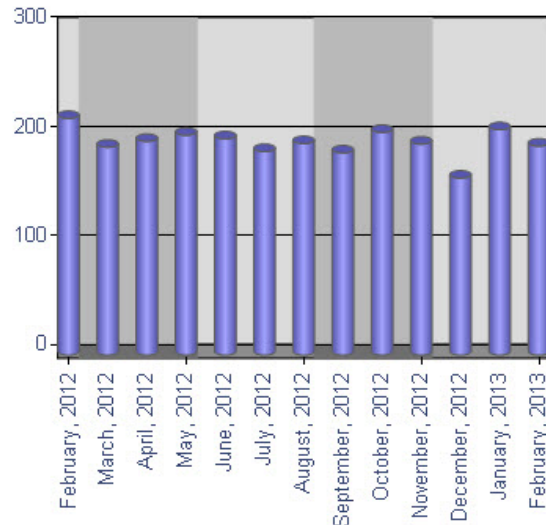
In limited cases, employees see some similarities to personal media consumption (information-seeking) and work related media consumption (also information seeking). However, despite these similarities, there are subtly conveyed concerns that social media are a growing source of distraction at MaxPort. Amid these concerns, an example—the company's internal blogs— shows how social technology improves task performance and group communication. Social content that is posted to the intranet is legitimized since, like blogs, it enhances communication among peers. These blogs represent "structures of legitimation" or schemes that are interpreted and sanctioned by members of a social system (Giddens, 1984; Orlikowski, 1992). These preferred schemes enable the sharing of meanings and mediate communication in social

systems (Orlikowski). Blogs are sanctioned and encouraged since they can help communicate task-critical information and assist with team building, while personal social media at work draws subtle criticism and are tacitly de-legitimized (**Table 4-3**).

Figure 4-1. Revised structurational model of technology

ARROW/ IDENTIFIED STRUCTURE	TYPE OF INFLUENCE	NATURE OF INFLUENCE AT MAXPORT
a/ Sneaker	Technology as a product of human action	Intranet is repository for hundreds of corporate documents. However, employees see intranet as complementary and not secondary means of communicating (after face-to-face). Preference for social interactions limits intranet's scope.
b/ Problematic affordance	Technology as a medium of human action	Reflected in SharePoint's technical design (outside of MaxPort control). Intranet has design and/or functionality flaws that make searching for documents problematic.
c/ Current culture	Institutional conditions of interaction with technology	MaxPort's management approach means employees perceive little need to work from home; out of work technology use kept to a minimum. At-work technology use is driven by interpersonal communication.
d/ Helper	Institutional consequences of interaction with technology	MaxPort deploys intranet points of contact and information technology teams to deal with SharePoint questions.

This figure shows Orlikowski's (1992) structurational model of technology. In adapting Orlikowski's original model, I identify specific organizational structures. The names of the structures are unique to the MaxPort context, although they do address potential issues worth exploring in other contexts.

Figure 4-2. Average number of unique monthly visitors to MaxPort’s intranet.**Table 4-1:** MaxPort’s current culture structure

Description: Several institutional characteristics comprise this structure. Company’s recent growth means the amount of documents on intranet has increased; company’s management approach includes giving autonomy to employees and having intensive interview process to determine interpersonal fit, which emphasizes interpersonal communication in technology use and problem solving; employees perceive little pressure to use technology outside of work.

Evidence:

- “The impression is that the company wants employees to be happy.”
- “We have gone through some growing pains but I think we’ve come through them pretty well.”
- “We’re not going to micromanage everything. That allows the employee to want to give more.”

Table 4-2: Distinguishing at-home technology use from at-work technology use

Common at-home technology patterns:	Common at-work technology patterns:
<ul style="list-style-type: none"> • Social media (often) to connect with family • Some perceptions that keeping public profiles in personal social media and work media are similar but such comparisons are largely dismissed at MaxPort • Limited technology use for work at home • Information seeking (news, current events) 	<ul style="list-style-type: none"> • Multiple platforms (including intranet, instant messaging, OneNote) • Some social media use at-work for personal, private purposes (considered unsanctioned and subject to some subtle criticisms) • Information seeking (work updates, meeting times) and blogging (considered sanctioned use and supported)

Table 4-3: Comparing sanctioned and un-sanctioned social technology in the workplace

Sanctioned Venue: Internal blogs	Unsanctioned Venue: Personal social media
Relationship to work: Assist with problem solving and sharing of crucial task information; blogs on social topics good for team building; informal discussion forum that assists with planning.	Relationship to work: Helps with work-related socialization; some (but limited) use of LinkedIn to communicate with external clients; industry pushing for internal social media adoption

Chapter 5- Research Questions 2 and 3 Analysis

Framed by structuration theory, this chapter addresses two research questions concerning the social influences on technology use at MaxPort. Research question two of this dissertation asks how employees (and the company) first decide to utilize MaxPort's intranet and research question three of this dissertation investigates how employees decide to continue using the intranet over time. These research questions treat structuration as a temporal process that is subject to social negotiation and interpretation. As a social system, the company's entire intranet enables employees to create and re-create social meaning and group cohesion. This project's focus on technology adoption and adaptation fits into structuration's views on social system development (Fulk 1993; Poole & DeSanctis 1990).

MaxPort employees expressed both highly positive and highly negative views on the intranet. One employee said that when SharePoint is down and inaccessible, "I'm kind of dead in the water because everything I do is in SharePoint." This contrasts to one employee who remarked, "I'll be brutally honest with you, I use it as a little as I can." These tensions primarily involve access to information. Scholars (Bennett et al., 2010; Cozijn et al. 2007) and industry experts (Ross, 2009) have argued that intranets pose logistical problems for companies because of the sheer number of functions that intranets perform and the large number of documents they contain. With so many documents, intranets require constant maintenance and management (Bennett et al., 2010).

In the preceding chapter, the "current culture" structure at MaxPort was discussed. This chapter examines three other structures that are influenced by and that influence technology and employee relationships at MaxPort: The "sneaker," "problematic affordance," and "helper" structures. The sneaker structure sheds light on employees' interactions amongst themselves and

suggests that for all of technology's benefits in the workplace, employees still prefer face-to-face communication. The helper and problematic affordance structures reflect how employees deal with the large number of documents and tools that intranets offer. These structures are highlighted in Tables 5-1, 5-2, and 5-4. Definitions for these structures and evidence supporting these definitions appear in these tables.

Research Question 2- Adopting Technology

There are two contexts involved in the adoption of technology at MaxPort: Newly hired employees' learning about the various tools at their disposal (specifically the intranet) and the intranet's broader company-wide adoption. When employees are first hired at MaxPort they undergo a standard orientation. They meet their new peers, they learn corporate policy, and they develop a feel for their new jobs. As part of MaxPort's orientation, they are also introduced to the company intranet. New hire Marissa's experiences reflect a broad trend among employees. "When I was first learning [about SharePoint], I was just browsing," Marissa explained. "I'd go into the company news and click on all records, just scan some old company news to see what was going on and things that are posted there." Marissa's 'just browsing' allowed her to understand how the company operates and she became more acquainted with MaxPort's key personnel. In addition to learning about the SharePoint's work areas and team sites, Marissa also perused the company's social site (which is part of the intranet). Another new hire, Julia, had similar experiences in learning the company culture.

When I first started I was like, 'Who cares about all of this stuff?' It's kind of a good way of initiating you into the workings of the company and company culture. The longer I'm here, the more I know who people are and what they do, the more it's interesting and pertinent to me.

Like Marissa, Julia learned by clicking on links and exploring the intranet during her downtime. Related to this, a manager reported that much of what she knows about Net-Source is self-taught during periods of down time when they do not have much work to do. “[It’s] just spending time and seeing different bits and where pieces would lead me and whether there’s anything useful for me to remember,” the manager observed.

For the most part, SharePoint is perceived as easy to initially use. It opens in a standard Internet browser and involves hypertext links that connect various pages. Marissa and Julia’s attitudes and descriptions of intranet searching reflect the platform’s ease of navigability. Employees need little instruction in how to use the search function, bookmarking, or linking functions since the platform so closely resembles a traditional Internet browser such as Firefox or Google Chrome. The challenge is not in learning how to utilize the intranet; the difficulty is in finding the exact location of crucial information and the links to documents and other computer programs that interface with the intranet. Pointed out one new employee: “There’s just so much data there, and they touch the highpoints [in orientation]. You just have to play around in it to find things.” When questions emerge concerning where to locate a document or how to navigate the site, new employees typically turn to their peers.

In describing the orientation and his first few weeks with SharePoint long-time employee David said, “It was workers showing workers how to navigate through.” During our interview, David offered a comment that spoke to a dominant preference for face-to-face communication at MaxPort. At work each day, David uses SharePoint, e-mail, the company’s instant-messaging program and what he called “SneakerNet.” When I asked what he meant by SneakerNet, he laughed, pointed to his shoes, and then explained:

We’re pretty much co-located. There’s four of us in my office. Across the hall, there’s four there. We’re all right here with each other. It’s faster and easier to go to someone in person. I like technology, and I like all this stuff and I use it frequently. It’s just, if I need

something now...Boom, I'm walking to someone.

David told a story about when he had a question for a co-worker on a project. He instantly messaged the employee, who did not notice David's message for almost an hour. Although the issue was not time sensitive, his colleague's delayed response frustrated David. From this anecdote, the "sneaker structure" is introduced (**Table 5-1**). Certainly, not all MaxPort employees prefer these face-to-face encounters, yet David's comments reflect a prevailing attitude about the company's support for interpersonal collaboration. With this anecdote, David demonstrates how the sneaker structure helps employees avoid the intranet. The result is increased social interaction among employees; they simply prefer to discuss work issues among themselves without having the intranet mediate their interactions.

Another long-time employee, Terrance, used language that appears to support this notion of a sneaker structure precluding technology use and enhancing interpersonal communication. Being in immediate physical proximity to one's co-workers helps when people need to collaborate on tasks and when they have questions about technology. Dan added that the company's tight-knit management approach helps in these two areas and facilitates communication with employees in the company's international offices.

If you're in a global organization and you want to find somebody that knows a particular aspect of something, you're going to hunt and peck. You're going to try and go up and down the chain to figure who knows that. Here, we're more intimate so you know what people are known in.

The sneaker structure exerts other influences when it comes to social interaction. In response to organizational conditions and employee preferences, the sneaker structure encourages employees to troubleshoot intranet questions among themselves. In other words, because the environment at MaxPort is so conducive to interpersonal communication, employees often ask their peers questions about the intranet in face-to-face interactions. Consider Nathan, whose

primary means of learning about the intranet was asking his peers. If he encountered an issue when he was first looking for information in SharePoint, “I would just walk over to their office and be like, ‘I can’t find this, what should I do?’ before I even knew how to upload a document to it.” Nathan said he did not have one particular person that showed him the SharePoint ropes and instead relied on whoever was in close physical proximity. Despite the push toward collaboration with digital media, companies still primarily benefit from the real-time interactions that people have in-person. This cannot be overlooked, as it crosses all age, experience, and geography differences at MaxPort. This attitude and preference for direct communication is shaped by several ideas that were raised earlier, namely the limited desire for employee self-expression and the de-legitimizing patterns that emerge around mediated communication. When confronted by social pressures to avoid creating expressive online content or when pressured to avoid communicating via a technology that may lead to instantaneous communication, employees communicate with each other face-to-face. This contributes to the technology avoidance that was repeatedly observed in interviews.

One international employee characterized MaxPort as the type of organization that encourages open communication between employees regardless of their physical location or job status. To that end, Isabel said she has no problems about calling up her peers and working through a work task: “We encourage a culture where if there’s something unusual or you want to discuss something, you’re going to discuss it rather than send an email.” When co-workers interact face-to face or via the telephone, “That’s where you start to use creativity, people bouncing ideas off one another.” In her interview, Isabel commented that SharePoint should complement the face-to-face dialogues that are happening on projects, but it should not replace live peer interactions.

Shaped by the current culture and sneaker structures, employees individualize their work routines. This exerts a strong influence over technology use. Confounding this development is

SharePoint's size, which is a technology design factor that shapes how the technology is used.

One employee, Terrance, reported that he tries to learn all of the facets of the intranet but admitted it can be a struggle because the intranet is such a vast information system. "I would like to learn it and I would like to learn more about it," Terrance said. "If I'm not using it everyday, I don't see why I need to fill that silo in my head with that information." In a cyclical manner, if he cannot commit a particular intranet task to memory then he is less likely to use it, which limits his ability to recall something and his overall intranet use.

Although expressed differently, Anthony's views are similar to Terrance's. Anthony estimated that he only uses 20 percent of SharePoint's tools. Anthony is very comfortable with the intranet yet he also added that he is "not using it to the level I should be." After the initial training and intranet introduction, Anthony focused his energy on learning how to do his job. If he does not regularly use a SharePoint tool for a specific work task, then it is not a priority to learn about that tool. Both Anthony and Terrance have worked for MaxPort for fewer than five years, but both men are in their 40s and have had significant professional experience. They have well-established work routines in which certain aspects of the intranet are more frequently used than others. These employees need to regularly use the intranet to understand how exactly it can benefit them; occasional training sessions are not enough for them. The platform loses its ability to facilitate peer communication and can hurt productivity when employees perceive that the technology has too many functions and can serve too many roles. This information system, thus, appears to work best when employees make frequent use of limited aspects of the system. As discussed later, this idea has crucial implications for corporate managers and system designers.

Other employees added to this set of discussion points. "I've probably forgotten more than I need to know," one software trainer observed. MaxPort provides employees with a great deal of crucial information when they first arrive, which makes it hard for employees to learn all of SharePoint's nuances. Another trainer described the difficulty in getting people to retain

information from their orientation: “They didn’t remember my name, let alone half of what I said.” This dialogue speaks to a previously unaddressed technological complexity about intranets that warrants consideration in the following section. A breakdown can be understood in the technology based on interview findings. Employees are bombarded with information when they are first hired, and they are immersed in their particular work tasks that require only limited portions of the intranet. Software trainers recognize that this overload occurs yet, by and large, they are powerless to change this training. Employees attend the training and quickly forget the locations of key documents and troubleshooting tips. This is a limitation of both the technology (the intranet’s large size) and the company’s management approach to training. The intranet is frequently used, but employees feel frustration and training does not appear to be sufficiently maximized in terms of employee retention of information. This next section demonstrates another site and management issue, the intranet’s search issues.

Overcoming Search Roadblocks

An important aspect of intranets is the large amount of corporate information that companies make accessible to regular employees (Edenius & Borgerson, 2003; Miller, 2013; Murgolo-Poore, Pitt and Ewing, 2002). One intranet technological affordance—its search function— demonstrates the complexity of information use in the workplace. A majority of interviewees ($N=14$) directly mentioned problems finding information through SharePoint’s search tools. In discussing these search issues, employees voiced concerns with the “modalities of structuration” or the conditions of structuration that a social system offers to define possible actions (Giddens, 1979). From Giddens’ sociological analysis and others’ discussions of technology (Orlikowski, 1992; Poole & DeSanctis, 1992), we see how both social and technological modalities constrain human behavior and limit the range of possible actions that

someone can take. Although these modalities have been mentioned, scholars to this point have not fully explored the effects of specific modalities.

The search engine issue at MaxPort extends beyond normal complaints about work, and an analysis of interview data shows that the search issue serves to foster a sense of unity among employees. Meaning is shared and norms reproduced in employees' frustrations with the search engine. "One of the biggest complaints [about SharePoint], and I share this, is it is hard to find information if you don't know where to go," according to Brad, who works in information technology. A new hire spoke to the company-wide recognition of the search issue. This person believed that because the intranet covers so many different work areas and because employees have so many ways of managing documents, "searchability is always an issue." In addition, this person pointed out that:

There are so many different ways that you can search for the same thing, different places that it can live and things like that. MaxPort is definitely taking steps to correct and minimize the difficulty to search for things. It's just a very long, ongoing process.

Another veteran employee who was with the company through SharePoint's initial deployment observed that, "You're taking a little bit of a gamble when you look for something in there, whether it's still valid or not." Interviewees repeatedly described searching for a work document only to find multiple outdated versions of the document. Worth noting is that Brad and his peers describe the search issue with strong language that speaks to a collective experience. Brad spoke about 'sharing' a company-wide concern with finding documents, and the veteran employee here discusses this problem with "you're." The challenge in finding the right document is shared by employees at all levels of the company and with varying degrees of experience at MaxPort.

The experience of one new employee illustrates how hard it can be to find something specific. In addition, this person's account demonstrates the importance of continuously using the site.

There's a website where you can check your email from home. When I was first working here, someone showed me that page and I didn't need it for a long time. And then I'm like, 'Oh yeah I want to do that now.' I remember searching, I searched for like 'work from home' 'email' 'email from home' ...all of this stuff. I just could not find the document.

Nathan knew he learned about the work from home protocol during his training, yet it had been so long he simply forgot where to acquire the this information. Frustrated, he eventually asked his manager for help. "Why should I search when I can just ask you?" Nathan recalled asking the manager, who eventually e-mailed Nathan the information he needed. Another employee, Chuck, described a similarly frustrating situation in searching for information that was critical for a work task:

One thing I did recently was look up the blood drive to see when that's coming up. The first link on the search engine will be a sign up sheet from 2008 or something like that. The search engine ... I think they work on it occasionally but it hasn't been too totally helpful.

A common solution to the search problem is to ask a nearby officemate or ask acquaintances that are elsewhere in the building for help. If a customer has a question about one of MaxPort's products that new hire Marissa cannot answer, she first searches SharePoint. "Most of the time I can't find it," she observed. "I usually search and then I wander around and ask people until I get the answer." Another employee observed that when he searches he usually gets "several hundred hits." This employee reviews the first page of search results before seeking input. "Right now I have three other officemates. I'll turn around, 'Hey any you guys know how to do this?'"

Just as personal social media are the sources of some workplace tension, so too is the search engine issue. One veteran employee who works in information technology dismissed her peers' difficulties in finding documents. "They don't know what they're doing. Dear God, I can find anything I'm looking for," the employee said as they laughed. The employee admits that SharePoint is "not as intuitive as you would like it to be, absolutely." However, this employee went on to describe solutions to the search problem:

You have to say, 'Ok I didn't find it this way. Let me think about what Net-Source wants. Let me try it this way, or let me try it that way. Let me, you know, let me narrow it down to this site only.' And a lot of people forget that we have a little bit of functionality. Sometimes you just can't find it. But I can usually find what I'm looking for.

Here, a company veteran reacts with disdain to the common complaint about search difficulties. Her response is to encourage even more creative thinking by MaxPort staff. Her response is also to mock her peers, and this comment was a stronger criticism than what was echoed in most interviews. A reading of this comment suggests that, in spite of the relative accord at MaxPort, there are some significant sources of friction between employees. (An example of employees' soft criticism of the intranet can be seen in the comments of Chuck, who repeatedly struggled with the search engine yet used the phrase "I don't want to be judgmental on it.") Even though Chuck is bothered by the problem, he appears unwilling to criticize the company. By comparison, Chuck's peer laughs at employees who cannot find the right documents.

Although there is frustration with SharePoint, the intranet's search issues can be understood in a beneficial light. An employee will ask a peer for help and then end up spending time in their person's office talking about other projects or simply engaging in informal, non-work discussion. The technology has a dominant limitation, and employees as individual agents shape the technology's subsequent use by avoiding it. Company-provided data demonstrate that the intranet is heavily used (several hundred employees per day visit the intranet on average). However, employees in their regular interactions with the intranet appear to prefer only limited

segments of the platform. Structuration scholars to this point have not investigated the impact of intranets on socialization, yet as this analysis demonstrates, intranets clearly can have such an impact. While potentially hurting productivity, the technology's limitations encourage people to ask their peers for assistance in-person, which assists in workplace socialization and meaning sharing.

Summary of Research Question 2 Findings

The second research question concerned the specific ways that social interactions among employees affect their decisions to initially utilize the corporate intranet and related internal social media. Consistent with structuration theory, employee social exchanges both influence and are influenced by technology use in the organization. Employees generally perceive that the intranet is easy to use. However, employees encounter difficulty in finding information and finding the proper documents amid the vast amount of tools and functionalities that the intranet provides. This is the “problematic affordance” structure. (**Table 5-2**)

In developing their work routines, employees perceive an open communication environment at MaxPort. This environment encourages employees to seek their peers' feedback and employees learn to ask for help when they have questions about technology. These interactions are manifested in the “sneaker structure,” which is an employee-negotiated attitude that one's peers are crucial for finding information when searches lead to problematic results. The sneaker structure also encourages employees to interact over non-technology related questions and to collaborate face-to-face. These forms of socially negotiated behavior counter and help one overcome some of the intranet's limitations (**Table 5-3**). Technology in this case influences social interaction, and agents in turn shapes the narrowly fragmented use and adaptation of the

technology in the workplace. This study's next section further explores the specific ways in which communication is impacted by technology's adaptation.

Research Question 3- Adapting Technology

A year after MaxPort initially adopted SharePoint, the company expanded by hiring dozens of new staff. This chapter's second section investigates the impact of this organizational change on continued technology use. For veteran employees, the intranet's organizational tree and individual employee profile pages have become helpful for keeping up with personnel changes. "I meet someone and I go, 'Gee I didn't even know they worked here,'" Chuck observed. "Then I'll try to see where they fit into the company." Additionally, the company growth meant the amount of information stored in SharePoint grew. According to one veteran employee, Kara, these two phenomena are intertwined: "I think if we didn't have that big of a growth spurt that one year, [the intranet] wouldn't have grown as fast as it did." Still, implementing a new technology can be difficult as demonstrated by MaxPort's adoption of the intranet. An employee who was with the company when SharePoint was initially adopted recalled the skepticism about the platform. According to Gerry:

I think there weren't a lot of people early on that were able to answer the questions that we were coming with. 'What about this? Can we do this? Is this going to work? Is this going to be what we want it to be down the road?'

When the company expanded, a cadre of new managers who joined the company at the time encouraged their employees to use SharePoint. These new managers showed their employees exactly how to use the intranet, and how to find the documents that they needed to complete tasks.

Customizing a technology comes with risk, according to one veteran employee.

“MaxPort’s very big on customizing everything,” observed this employee, who was with the company through SharePoint’s initial deployment. “We customized SharePoint to how we wanted to work, not how [SharePoint designer] Microsoft wanted it work.” When the company upgraded to another version of SharePoint, many of their customizations in the older version did not quite transfer well to the new system. With these difficulties, there was limited adopted use of the new SharePoint version. “Finally, the [intranet oversight] team made a decision,” Kara recalled. ““Ok now, we’re going to use it the way Microsoft intended or we’re never going to be able to upgrade again.”” From Kara’s perspective, usage increased once the company engaged in *less* customization. In addition to the technology system’s individual properties influencing how it is used, this analysis demonstrates that the company’s and individual agents’ own actions shape how technology is changed over time. A veteran employee relayed his thoughts about one example of the company’s overall resistance to change in discussing Microsoft-initiated changes to its Outlook platform. A manager was excited about Outlook’s new ability to color-code emails, yet this employee recalled that his team had absolutely no interest in the making the changes to the new email system. “We just want to send an email... We didn’t care that everything was color-coded and we had the ability to organize things seven different ways.” Eventually the Outlook changes were adopted but this particular employee’s perspective suggests that it took a manager’s encouragement to gain acceptance. This anecdote also reveals that even minor changes can be met with frustration at MaxPort.

This adapted use of technology challenges Orlikowski’s (1992) conceptualization of information systems as “black boxes.” Orlikowski suggested that technology users often treat a technology as a closed system, whereas designers may treat a technology as an open system that can be modified. According to MaxPort employees, the reverse has happened. At one point the company over customized its SharePoint package and problems developed. This forced the

company to upgrade its SharePoint platform to correct the problems stemming from over-customization. In this way, employees and the company were hesitant about making changes from Microsoft's original designs. "We've got more capabilities and it's more flexible but with that comes added complexity and quirks," commented one employee. This employee's language is highly relevant because it speaks directly to several theoretical issues in structuration. The newer version of technology may be more 'flexible' and may offer more 'capabilities' than a prior version. However, individual agents and the organization may not feel equipped or ready to deal with these changes. Organizational routines may be so well established that the introduction of a new technology or an upgrade to a new version of a technology may ultimately limit a technology's effectiveness. This is particularly important for organizational communication, which is often predicated on established routines.

A dominant perspective at MaxPort is that some degree of tailoring software to the individual's needs is an inevitable aspect of regular business. "You can give somebody a tool and say 'This is how it's supposed to work.' But they're going to use it the way they want," Kara pointed out. Employees expect technology to be adapted in some way. Kara's co-worker Linda supported this idea: "Without being able to customize it and individualize it and meet the needs of a particular group, I think software loses value." To that end, MaxPort has modified SharePoint's dropdown menus and internal webpages, and the intranet's overall look. The intranet's infrastructure has to be flexible enough to allow teams to use it in their own ways, according to Linda. If the intranet cannot meet the needs of individual teams by offering customization, teams may shift data and other documents away from the intranet.

One project manager, Rhonda, emphasized the importance of helping employees navigate the intranet: "A lot of times people think, 'Eh, I don't need that stuff. Or 'I know where everything is, just send me a shortcut and I don't need to navigate these pages.'" Rather than delegating, Rhonda updates team pages, uploads documents to the intranet, and improves the

intranet navigability for her teams. To encourage intranet use, one trainer expressed the view that employees should understand the direct benefit of the intranet for their work needs. Like Rhonda, Rachel is aware that SharePoint sometimes frustrates employees. The key is to tailor training to employees' work needs:

It's like you're dangling the carrot. Sometimes you have to go back and reinforce things a couple of times. You may have to go back and some individual coaching, but eventually ... if it's a good change, it will take place.

Employees believe MaxPort has a relatively flat management structure, which results in a comfortable work environment and few corporate pressures. However, management takes an active role in encouraging employees to utilize task-critical technology such as the intranet. This guidance from management countered change-resistant skepticism when the intranet was first deployed several years ago and buttresses against employees' continued questions about the intranet's search engine limitations.

Informal and Formal Workspaces

Structuration distinguishes between a piece of technology's formal and informal uses (DeSanctis & Poole, 1994). People can either faithfully or unfaithfully use a piece of technology; faithful use is in accordance with a software designer's intended use and unfaithful use in accordance with the user's unexpected experiences with technology (DeSanctis & Poole, 1994). Interestingly, DeSanctis and Poole focus their analysis on "technology features" or the specific rules and resources that a technology affords. Findings from this study bring to light a new area of formal/informal or faithful/unfaithful intranet use.

Employees who create drafts of documents worry about *incorrect* items appearing in search results. Consider Stan's perspective:

I mean every Word document, every draft, everything theoretically is supposed to go on Net-Source. My immediate thought was this is not going to work. We may go through 87 different drafts of a [document] before we arrive at a final. And, now we have all 87 of those drafts but not all 87 of those things need to be up on Net-Source for everybody to get at.

Stan is concerned that unofficial drafts of documents will appear in searches, and he worries his peers will use these early drafts when there are *correct* versions. One of Stan's co-workers, Gerry, made several similar points about document drafts. Gerry indicated the level of review required of a particular document dictates what he posts to SharePoint. An "ad-hoc" review that is less formal will get e-mailed to his teammates. "If it's less formal and we're getting an initial draft out, you don't even use these formal posting methods at all," Gerry said. If it is something that requires a formal, multi-stage peer review process where an early version of the document is clearly labeled draft, then the document will get posted to SharePoint. Both Stan and Gerry work on teams that involve creative (non-production) tasks, so they both have an overriding concern with finding the proper templates to guide their projects. Because their work needs to conform to some creative standards, they often consult corporate policy. Ineffective search results pose significant work obstacles for the two employees.

According to Gerry, the biggest example of MaxPort's adaptation of SharePoint is in the virtual workspaces. "Probably the biggest change has been with our use of sort of a localized review space," Gerry said. At various product development stages, Gerry's team requires more document reviews. To that end, SharePoint works well because it allows employees to easily edit document drafts. Also, Adobe Acrobat allows people to embed notes in projects as they are reviewed. These notes mitigate the confusion that might arise as documents are edited. According to Gerry,

You'll say, 'Here's my draft one document.' You'll have a dozen people pounce on it, putting umpteen stickies all over the thing. Then you might use that document to talk back and forth... on email, phone. Practically speaking it's not usually a problem because you create the document, by posting it you also send out an e-mail. It's not like people

are out of the loop.

A simple platform affordance—stickies in an Adobe Acrobat file—enables people to communicate back and forth concerning a project's development.

Two tools appear as employee-sanctioned devices for managing intranet content. Nine interviewees mentioned having alerts that notify them of changes to SharePoint webpages and 48 of 71 survey respondents reported having alerts. These alerts automatically generate an email when a webpage is changed. The perception is that the alerts save employees time because employees do not have to actively monitor the vast SharePoint portal. Instead, employees only need to respond when they are notified of a change. One veteran employee described how alerts function:

Everything that's newly posted I see and it allows me to screen what I go and visit. It just shows up as another email for me. On the one hand it tends to increase the number of emails that I get. But on the other hand, at least I'm seeing everything that's posted and I find that very helpful.

Another SharePoint feature that employees customize on the basis of their personal preferences and social interactions is bookmarks. Similar to regular Internet bookmarks, SharePoint's bookmarks are accessible in web browsers and enable employees to quickly check a team's intranet page. Twelve out of 23 interviewees reported actively using SharePoint's bookmarks and 58 out of 71 survey respondents reported having intranet bookmarks. Bookmarks are easy for employees to modify for their own work needs.

Like alerts, bookmarks appear to have company-wide support for their sanctioned use in the workplace. In other words, there is a general perception that bookmarks are an effective solution to the challenge of locating desired information in the intranet. However, when SharePoint crashes (as it did on one of my site visits in July), employees cannot access their bookmarks.

Furthermore, if an intranet page's link changes, then employees are forced to search for that page again, which defeats the bookmark's original purpose.

Continuing Technology Use: The 'helper structure'

MaxPort provides an ample amount of help with SharePoint with four groups: Department managers and peers who often respond to basic intranet questions; trainers who orient employees to the intranet when they are hired; team leaders who are responsible for uploading documents to their team sites and who may have advanced SharePoint training; and a two-person information technology (IT) team that is specifically assigned to help solve complex and highly technical intranet issues. These groups comprise this study's fourth and final structure, the "helper" structure (**Table 5-4**).

The team leaders, dubbed intranet points of contacts or IPOCs in accordance with industry tradition, are responsible for maintaining content for each work group's SharePoint page. IPOCs also maintain lists of employees who can access a team page and maintain permissions levels for those pages. Most employees have read-only permissions, although the IPOC often has read, write, and contribute privileges. The IPOC is the "next step up in the knowledge ladder than just your regular SharePoint user," one trainer said. The company's formal expectation is that IPOCs are a go-to resource for intranet questions. Problematically from the company's perspective, only five interviewees reported actively consulting with their IPOCs and only 38 out of 71 survey respondents reported knowing the name of their IPOC.

Building on the sneaker structure from earlier, employees are inclined to seek help from the helper structure. The impact of this structure can be understood by several comments from new employee Anthony, who said his former company "wanted to get more into SharePoint and intranet." Yet the company struggled because they only had one person to oversee the intranet

and employees were told to manage their department's sections on their own time. "To keep it up, updated and current you need to have a dedicated resource," Anthony observed. "And I think MaxPort has that." If employees do not utilize their IPOC or manager, then they usually consult MaxPort's two-person IT-intranet team. "When we need something built, we go ask [IT] for it and get it done," according to David. "Then maintenance-wise, we do it ourselves in terms of putting things up and taking things down." From David's perspective, active site maintenance is left to the individual employee but the more complex technical issues are easily resolved with a simple request to the IT team.

Project manager Rhonda described how she developed an internal blog where all staff, including those in the company's international offices, could comment on documents as they were revised. SharePoint did not allow Rhonda to develop the blog in the exact way that she wanted, so she approached her contact in IT. "I go to her and I say, 'This is what I want to do. Can SharePoint handle this?' Then we start negotiating." The negotiation is typical of Rhonda's interactions with her primary IT contact:

We kind of patchwork it together to get SharePoint to do what we want it to do. Every now and then she hits a roadblock, she says, 'Just can't do it.' Then we come up with some alternative. Most of the time she's been able to come up with something satisfactory.

This anecdote shows formal and informal negotiation over a software upgrade. Rhonda needs to know if adding a blog is technically even possible from a design perspective (formal negotiation). Rhonda also understands that this IT team has many ongoing projects and so she knows that the team will have to balance her particular request with other priorities (informal negotiation).

International Offices and Technology Adaptation

One final area of technology adaptation involves the company's international operations. International employees account for about 10 percent of the company's workforce. However, few respondents in the United States mentioned interacting with their peers in the company's foreign offices. Still, some U.S.-based employees reported having regular interactions with their international peers, and it helps explain how technology fosters close working relationships across vast geographic distances.

MaxPort created local pages for each international office, and this has been helpful in a number of areas, according to interviewees. SharePoint offers a way of "keeping up with things" that is beneficial to internal networking, according to Isabel. For instance, she often checks the company schedule to see what her U.S. peers are working on. If she knows that a colleague just had lunch when she calls, she'll ask about they had for lunch. "It just kind of keeps you involved in what's going on," Isabel said of the intranet. "I think it helps strengthen working relationships as well because you know what's going on at each of the offices." This internal networking works both ways. For example, one of Isabel's peers started teaching Zumba at work at the end of the day. When Isabel talked to a U.S.-based co-worker, this person asked about Zumba in her office, knowing that it was now offered in Isabel's office. "It gives you something in common without having to go out of your way and say, 'By the way we're doing this.' I believe it does strengthen working relationships in that respect."

This Zumba example is important because it illustrates a positive use of intranet content that is more social in nature. The result is enhanced social interactions among employees. Although a clear majority of MaxPort employees are located in one primary office, a limited segment of workers have offices in several international locations. Socially oriented intranet content (such as posts about Zumba and other recreational activities) serve a useful meaning-

sharing function at MaxPort. With international employees being unable to directly participate in the many social activities at MaxPort's main office and vice versa, intranet content concerning these activities helps foster organizational identity and cohesiveness. MaxPort's culture is conveyed through these posts and despite the distances between offices, many international employees said they do not feel separated from their U.S.-based peers. The posting of formal company policies to the centralized intranet workspace also assists in this form of meaning-sharing; corporate policies remain nearly the same from office to office at MaxPort. This continuity of work guidelines from the U.S. headquarters to foreign offices enables employees to feel part of the overall group.

Consider the perspective of another international employee, who observed how the intranet helps ensure that: "We're part of the bigger MaxPort, the U.S. head office rather than our own little isolated small company." MaxPort effectively communicates with its international offices, according to the employee.

Obviously on a daily basis we have a different marketplace and we have different clients, different issues. From a corporation perspective, I think it's important that people feel like we're part of the bigger MaxPort, the U.S. head office rather than our own little isolated small company.

Dean has a liaison in the U.S. who "95 percent of the time keeps us in the loop with things that are relevant to us." There are times when Dean's contact either forgets to tell him about a development, the contact is entirely unaware of a work issue, or the contact is out of the office for a short period of time and has not informed Dean. SharePoint helps Dean overcome these problems because he can quickly scan company-wide intranet posts to stay abreast of key corporate matters and related concerns. This section relating to international employees' use of the intranet is relevant to structuration theory because it demonstrates a pro-social engagement with technology that is both formally supported by the company (international employees are

encouraged to use the intranet) and informally condoned by international employees who find direct benefit and sanctioning in using the intranet.

Summary of Research Question 3 Findings

The third research question concerned the specific ways that social interactions among employees affect their decisions to continue using the corporate intranet and internal social media. With a nearly decade-old intranet, MaxPort offers several resources to support employees' use of the portal. The company has added local pages for each international office to give these offices their own workspaces. Additionally, information technology staff and intranet team leaders are convenient access points for employees who have questions involving intranet functions and content. Web-browser bookmarks and e-mail alerts help employees navigate the complex intranet. These tools are formally sanctioned (encouraged) by management and informally adopted and adapted by regular employees (**Table 5-3, Figure 5-2**). Despite some frustration with the intranet's search function, employee attitudes toward the various support tools are positive and employees encourage each other to utilize them. Building on this discussion of structuration, Table 5-3 compares the distinct processes of technology adoption and adaptation. These dual processes are subject to and influenced by social interaction, and are subject to and influenced by the technology itself. As Orlikowski (1992) notes and as Table 5-3 reinforces, there is reciprocal interaction between social interactions and technology. With the intranet perceived as an easy to use technology, employees begin to develop their individualized work routines when they are first hired at MaxPort. This interaction with technology evolves over time, as employees are either assigned new work tasks or they develop frustration with the intranet. (This point is explored more fully in my discussion of Figure 7-1 in chapter 7.) This change shapes how technology is adapted at MaxPort: There is a general expectation that work routines should be

developed and the technology modified. Yet widespread changes to the technology may alter the intranet's "spirit" or original goals. Thus corporate-wide initiatives to introduce new technology or significantly alter existing technology are seen as difficult and therefore a change-resistant culture develops around corporate-mandated technology changes. Employees interactions among each other serve to facilitate meaning sharing about the technology's limitations.

Table 5-1: MaxPort's sneaker structure

<p>Description: Orlikowski (1992) argues technology serves as a medium of interaction. Findings from this study slightly counter this. Even with myriad of technologies (including the intranet and instant messaging), employees prefer consulting with their peers face-to-face or by phone on tasks. Organizationally supported and driven by problems with intranet's search engine, direct interaction is seen as the most efficient way of communicating.</p>
<p>Evidence:</p> <ul style="list-style-type: none"> • "We're all right here with each other. It's faster and easier to go to someone in person." • "We encourage a culture where if there's something unusual or you want to discuss something, you're going to discuss it rather than send an email." • "Something that might have been an e-mail thread back and forth earlier, 'Oh we just had this conversation but we should CC everybody else on the team.'... Instead of that, we've got face to face." • "They try to co-locate people that are working together on the same projects so everybody's within three or four offices away. Very easy to communicate with and really no need to use anything on [SharePoint]."

Table 5-2: MaxPort's problematic affordance structure

<p>Description: Like many companies with intranets, MaxPort experiences problems related to document searches. With technology a product of human action, intranets have design flaws (from the software designer) <i>and</i> management issues (as a result of uploading hundreds of documents). This structure unites MaxPort employees as meaning is shared and norms reproduced in employees' frustrations with the search.</p>
<p>Evidence:</p> <ul style="list-style-type: none"> • "Searching doesn't always get you what you want." • "MaxPort is definitely taking steps to correct and minimize the difficulty to search for things. It's just a very long, ongoing process." • "I hate SharePoint." • "Anything that's sort of that... for us the brainstorming document, we're just kind of doing it off to the side. Documents, they don't get lost because every team knows about them. But truthfully, it's like there probably should a better structure for managing them."

Table 5-4: MaxPort's helper structure

<p>Description: As a technology company, MaxPort already has a well-developed information technology support structure. However, the intranet requires both formal help (experts known as intranet points of contact) and informal help (peers). Despite the frustration with the intranet's search, employees acknowledge that help is available from multiple sources.</p>
<p>Evidence:</p> <ul style="list-style-type: none"> • "To keep [the intranet] up, updated and current you need to have a dedicated resource. And I think MaxPort has that. They must to be able to keep it up like they do." • "[Our IT rep] is always willing to work with me and come up with something." • "[Our IT team is] extremely knowledgeable. Every once and a while I can e-mail them and be like, 'I'm trying to do this, I don't know how to do it.' They can email me back in five seconds." • "I would like to learn more about [the intranet's various functions] but if I'm not using something everyday, I don't see why I need to fill that silo in my head with that information if I know someone that could do it for me."

Table 5-3: The primary influences on intranet adoption and adaptation at MaxPort

ADOPT	ADAPT
<p>Social influences:</p> <ul style="list-style-type: none"> • Hiring process encourages close employee interaction; • Co-location of offices helps employees with intranet questions; • Flat management structure encourages joint problem solving; • Employees forget information and location of documents; orientation and ongoing training counter this. 	<p>Social influences:</p> <ul style="list-style-type: none"> • Company-wide expectation that technology will be customized; • Employees learn from peers to utilize bookmarks and alerts as they settle into work roles; • Team managers take active role in pushing employees to use intranet when use lags; • Struggle to identify "formal" and "informal" workspaces.
<p>Technological influences:</p> <ul style="list-style-type: none"> • Easy to use intranet, employees draw upon prior experiences using the Internet; • Hyperlinks facilitate employees' own discovery of intranet features. 	<p>Technological influences:</p> <ul style="list-style-type: none"> • Frustration with search results; • Adoption of related technology (e.g. OneNote) changes intranet's role.
<p>Reciprocal interactions:</p> <ul style="list-style-type: none"> • The intranet initially appears easy to use (technological influence). As employees adopt the intranet for their work needs, frustration with the search builds. Employees turn to co-workers for assistance (social influence) in finding materials. • Employees encouraged by peers (social influence) to use technological tools (alerts, bookmarks and blogs). 	

Chapter 6- Research Question 4 Analysis

This chapter focuses on the relationship between employee technology use and the employee-organization relationship. The purpose of the survey instrument was to collect data pertaining to employee technology use and their attitudes toward their relationship with their employee. The survey also included demographics questions. Findings from two sets of statistical tests on the relationship between technology use and the employee-organization relationship are reported below.

Respondents

Two postings to MaxPort's SharePoint intranet platform, Net-Source, were made to voluntarily recruit participants for this survey in November and December of 2012. Seventy-two of MaxPort's 300 employees completed the survey, which presented a response rate of 24%. Nineteen respondents skipped at least one demographics question at the end. With MaxPort being such a small company, it is reasonable to assume that employees were worried about a loss of confidentiality and many they opted not to respond to potentially identifying demographic questions.

The survey sample had a wide range of employment tenure at MaxPort, with four respondents having worked for the company for less than a year and one employee having worked for MaxPort for more than 20 years. The largest group of respondents had worked for MaxPort for four to six years (N=26). The sample included far more men (N= 40) than women (N=28); four people did not answer the gender question. As noted in the methods chapter, no employees from MaxPort's international offices reported participating in the survey. However, nine respondents did not answer that question, and some of the respondents who skipped this

question may have been international employees who answered the relationship management questions.

Descriptive Statistics

Descriptive statistics for three major constructs in this study— social use of the intranet, task-related use of the intranet, and relational outcomes— appear below. For each variable, the mean, standard deviation, and reliability coefficient are reported and the mean and standard deviations for individual measures are also reported (Tables 6-1 & 6-2).

Relational Quality Outcomes

A scale for each of the four relationship indicators of control mutuality, trust, satisfaction, and commitment was created using the composite (average) value for each indicator. As reported in the methods chapter, these scales had high internal consistency. Respondents were asked to state their level of agreement with 22 statements about their relationship with MaxPort on four total relationship indicators. After the reliability estimates were reviewed for the four scales, five statements were dropped from the final analysis. Employees in this study viewed their company quite positively, with overall mean scores on the four relationship quality outcomes ranging from 4.1 to 4.5 on a five-point scale.

Technology Use Measures

Based on interview findings, survey questions were created for intranet use and were tailored to MaxPort. Respondents were asked how many times in the last seven days they had

engaged in a certain work or social activity involving the intranet. Pertinent data for the two variables and each measure are reported in Table 6-2. Employee-submitted content to the intranet was minimal (employees, on average, reported producing .02 pieces of social content in the seven days prior to completing the survey). Even regular work tasks conducted with the assistance of the intranet averaged far less than once per week. For example, employees, on average, had updated an existing work document 3.31 times in the seven days prior to completing the survey (Table 6-2).

A basic check of frequencies on individual measures shows the limited extent of user contribution at MaxPort. For example, 67 respondents (or 97% of the sample) reported not posting any written social news, 70 respondents reported not posting any photos, 69 (or almost 100% of the sample) respondents reported posting no product review information, and 65 respondents (or 94% of the sample) reported posting no information about personal products that they wanted to sell.

Regression Analyses

This study's fourth and final research question related to how internal social media use and intranet site use impact employees' relationships with their employer. Four sets of regression analyses were conducted to evaluate how well technology use predicted peoples' relationships with their employer (as indicated by four indicators of control mutuality, satisfaction, trust, and commitment).

The predictors were the four technology use indices. Each of the four regression analyses did not show any predictive ability for technology use in respect to relationship quality. In other words, technology use does not appear to be a predictor of employee perception of relationship quality. The probability values for the regression analyses ranged from $p=.88$ to $p=.99$. In tables

6-3 through 6-6, indices are presented to indicate the relative strength of the individual predictors on each dependent variable. None of these correlations were statistically significant. Specifically, technology use did not significantly predict control mutuality ($R^2 = .00$, $F(4, 64) = .02$, $p > .05$); satisfaction ($R^2 = .02$, $F(4, 64) = .26$, $p > .05$); trust ($R^2 = .02$, $F(4, 64) = .30$, $p > .05$); or commitment ($R^2 = .01$, $F(4, 64) = .12$, $p > .05$).

Chi-square tests

The lack of statistically significant findings in the regression analysis was not surprising given the small sample size ($N = 72$) and the irregular data. To further explore whether a relationship existed between technology use and relationship quality, the seven variables (four relationship variables and three technology use variables) were converted into categorical variables. A series of 3x2 one-sample chi-square tests were conducted with each of three technology use variables (consuming social content, doing group work, and doing individual work) and four relationship indicators (trust, commitment, satisfaction, and control mutuality). Technology use consisted of two groups (either high/ low for consuming social content or did/did not do a task for group and individual work) and the relationship indicators consisted of three groups (high/ medium/ low). In total, 12 separate chi-square tests were conducted and one of these tests yielded significant results.

The group technology use variable yielded one marginally significant finding with respect to relationship outcomes. There appears to be a slightly significant difference between people who either do or do not engage in group-focused intranet work and their satisfaction with their employer: $X^2(2, N=69) = 5.98$, $p = .05$. More people than anticipated who do not do group work tended to have low satisfaction scores, whereas more people than anticipated who do group work tend to have higher satisfaction scores. Table 6-7 reports differences between expected and

observed values for this relational indicator. Based on this sample, there were no differences between group-focused work and control mutuality ($X^2(2, N=69)=2.61, p>.05$), trust ($X^2(2, N=69)=2.05, p>.05$), and commitment ($X^2(2, N=69)=.60, p>.05$).

Based on this sample, people who either engage or do not engage in individual-focused tasks seem equally likely to have the same feelings about their relationship with their employer. The results for trust were $X^2(2, N=69)=.32, p>.05$; the results for satisfaction were $X^2(2, N=69)=.76, p>.05$; the results for commitment were $X^2(2, N=69)=.19, p>.05$; the results for control mutuality were $X^2(2, N=69)=.45, p>.05$.

Similarly, based on this sample, people who consume either low or high amounts of social content seem equally likely to have the same feelings about their relationship with their employer: The results for trust were $X^2(2, N=69)=.31, p>.05$; the results for satisfaction were $X^2(2, N=69)=1.3, p>.05$; the results for commitment were $X^2(2, N=69)=1.2, p>.05$; the results for control mutuality were $X^2(2, N=69)=.03, p>.05$.

Table 6-1. Descriptive statistics for Relational Quality Outcomes.

Variable	Mean	SD
Control Mutuality (Overall)	4.1	.66
Reliability (Cronbach's $\alpha = 0.85$)		
Q1- When employees interact with this company, they have a sense of control over the situation.	4.1	.86
Q2- The company really listens to what its employees have to say.	4.1	.78
Q3- The company and employees are attentive to each other's needs.	4.3	.62
Q4- I believe employees have influence on the decision-makers of the company.	3.8	.92
Satisfaction (Overall)	4.4	.49
Reliability (Cronbach's $\alpha = 0.89$)		
Q1- Employees are happy with the company.	4.5	.53
Q2- Both the company and its employees benefit from the relationship.	4.5	.53
Q3- Most employees are happy with their interactions with the company.	4.3	.63
Q4- Generally speaking, I am pleased with the relationship the company has established with me.	4.5	.59
Q5- Most employees enjoy dealing with this company.	4.4	.60
Commitment (Overall)	4.5	.48
Reliability (Cronbach's $\alpha = 0.80$)		
Q1- I would rather have a relationship with this company than not.	4.7	.51
Q2- Compared to other companies, I value my relationship with this company more.	4.5	.66
Q3- There is a long-lasting bond between the company and its employees.	4.4	.66
Q4- I feel that the company is trying to maintain a long-term commitment with its employees.	4.4	.63
Trust (Overall)	4.4	.51
Reliability (Cronbach's $\alpha = 0.86$)		
Q1- The company respects its employees.	4.6	.55
Q2- The company can be relied on to keep its promises.	4.5	.61
Q3- When the company makes important decisions, it is concerned about its employees.	4.5	.63
Q4- I believe the company takes the opinions of employees into account when making decisions.	4.1	.65

Table 6-2. Descriptive statistics for Technology Use.

Variable	Mean	SD
Creating social intranet content (overall) Reliability (Cronbach's $\alpha = 0.67$)	.04	.20
Q1- In the last seven days, how many times have you used Social-Source to post written information of your own about a company social event	.07	.31
Q2- In the last seven days, how many times have you used Social-Source to post photos of your own about a company social event	.01	.11
Consuming social intranet content (overall) Reliability (Cronbach's $\alpha = 0.79$)	1.55	1.90
Q1- In the last seven days, how many times have you used Social-Source to read written information about a company social event (e.g., blood drive, fitness class, or potluck)	2.86	3.51
Q2- In the last seven days, how many times have you used Social-Source to look at photos about a company social event	.73	1.11
Q3- In the last seven days, how many times have you used Social-Source to read information about an item being sold or given away by a co-worker	2.11	3.33
Group-oriented work tasks (overall) Reliability (Cronbach's $\alpha = 0.79$)	1.14	2.90
Q1-In the last seven days, how many times have you used Net-Source to read updates about your work group	1.88	5.39
Q2-In the last seven days, how many times have you used Net-Source to collaborate directly with members of your work group	1.08	4.02
Q3-In the last seven days, how many times have you used Net-Source to collaborate with employees who are not on your work group	.68	2.14
Q4-In the last seven days, how many times have you used Net-Source to view the progress of fellow team members' work project	.90	2.22

Cont. Table 6-2. Descriptive statistics for Technology Use items.

Variable	Mean	SD
Individual-oriented work tasks (overall) Reliability (Cronbach's $\alpha = 0.78$)	1.93	3.62
Q1- In the last seven days, how many times have you used Net-Source to update an existing work document	3.31	6.21
Q2- In the last seven days, how many times have you used Net-Source to upload an entirely new work document	1.11	2.85
Q3- In the last seven days, how many times have you used Net-Source to update the progress of your work projects	1.36	3.11

Table 6-3. The Bivariate and Partial Correlations of the Predictors of Trust scale

Predictors	Correlation between each predictor and the trust scale	Correlation between each predictor and the trust scale, controlling for all other predictors
Creating social intranet content	-.07	-.08
Consuming social intranet content	.04	.05
Engaging in group-oriented work tasks	.02	-.05
Engaging in individual-oriented work tasks	.09	.11

Table 6-4. The Bivariate and Partial Correlations of the Predictors of Satisfaction scale

Predictors	Correlation between each predictor and the satisfaction scale	Correlation between each predictor and the satisfaction scale, controlling for all other predictors
Creating social intranet content	-.01	-.01
Consuming social intranet content	-.05	-.04
Engaging in group-oriented work tasks	-.07	-.11
Engaging in individual-oriented work tasks	.03	.10

Table 6-5. The Bivariate and Partial Correlations of Predictors of Control Mutuality scale

Predictors	Correlation between each predictor and the control mutuality scale	Correlation between each predictor and the control mutuality scale, controlling for all other predictors
Creating social intranet content	.01	.01
Consuming social intranet content	-.02	-.02
Engaging in group-oriented work tasks	-.02	-.01
Engaging in individual-oriented work tasks	-.02	-.01

Table 6-6. The Bivariate and Partial Correlations of the Predictors of Commitment scale

Predictors	Correlation between each predictor and the commitment scale	Correlation between each predictor and the commitment scale, controlling for all other predictors
Creating social intranet content	-.07	-.07
Consuming social intranet content	.01	.01
Engaging in group-oriented work tasks	.02	.07
Engaging in individual-oriented work tasks	-.04	-.07

Table 6-7. Chi-square table for satisfaction by group work

		No group work	Some group work	Total
Low satisfaction	Count	14	6	20
	Expected count	9.9	10.1	20
Medium Satisfaction	Count	10	19	29
	Expected count	14.3	14.7	29
High satisfaction	Count	34	35	20
	Expected count	34.0	35.0	20.0
Total		34.0	35.0	69

Chi-square value= 5.98, P=.05

Chapter 7- Discussion

This study had three interrelated objectives. The study's primary goal was to answer four research questions. It was also important to identify and describe the most critical structures involved in technology use and organizational communication at MaxPort, and to situate these descriptions into a broader theoretical context. This chapter presents a synthesis of the data that were discussed in the preceding three data chapters and pulls together this data into a framework that offers new insight into structuration theory and organizational communication. This also chapter offers concrete definitions of the structures that were proposed in chapters 4 and 5, as well as explores how these structures influence our understanding of organizational behavior. This chapter concludes with a discussion of this study's implications for three groups: Intranet programmers/ managers, employees, and scholars.

My modification of Orlikowski's (1992) model in Figure 4-1 may run counter to grounded theory's inductive approach to theory generation; a grounded theorist might argue that an entirely new model is needed. Yet true to grounded theory, this study draws upon multiple forms of data and an open coding of qualitative data to present several new conclusions that point the way for future research. These ideas are discussed midway through this chapter. Additionally, a new model for technology adoption and adaptation that reflects the lived realities of MaxPort employees is proposed in Figure 7-1.

Rethinking Organizational Structures

The structuration literature tends to neglect discussions or labels for specific structures. Orlikowski (1992) offered the notion of a "structure of legitimation" in organizations, and other scholars have described the structural conditions in organizations that influence group member

behavior. However, the literature would benefit by more direct conceptualizations of structures. In addressing this need, this study identified four structures: “current culture,” “sneaker,” “helper,” and “problematic affordance.” Each structure serves to influence and be influenced by human communication and interaction. It has been suggested that technology, an institution’s properties, and human agents all mutually influence each other in various structuration processes (Orlikowski, 1992). This discussion summarizes what the findings suggest concerning how these influences are exerted.

Current Culture

According to structuration theory, employees conduct their work in response to certain cultural, social, and economic forces. This is a major aspect of structuration as articulated by Giddens (1984), Orlikowski (1992) and more recently, Sinclair and Vogus (2011). The current culture structure describes how employees perceive the organization’s mission, goals, and official policies, as well as how these organizational properties actually influences employees. An aspect of the current culture structure, production routines, shapes employee technology-related behavior outside of the workplace. MaxPort’s organizational pressure for employees to work from home at off-hours appears to be driven, in part, by the cyclical nature of the company’s production phases. When the company is in a busy period, there is more expectation that employees work from home. Inside of the workplace, employees perceive a relatively easy-going atmosphere. Reflecting this friendly atmosphere, workers perceive that they are encouraged to interact directly with each other, which fosters a dominant company preference for face-to-face communication. Additionally, macro-level economic forces are a part of and shape this current culture structure. To a modest extent (even if it was not expressed in every interview), employees believe the

company has protected them from mass layoffs or other drastic measures during the recent economic downturn.

Related to this, employees repeatedly mentioned using the intranet's financial information website for a variety of reasons, including checking the company's fiscal health at the height of the downturn several years ago. Providing this information, according to one employee, shows how "They just have a very open philosophy in general." In response to this openness and other organizational characteristics, employees appear to value their relationship with the company as evidenced by the relative highly values on four relationship outcome measures that are reported in Table 4-1. This analysis of the organizational environment is in line with other structuration studies, yet this study makes a stronger case that scholars should more closely consider the impact of current economic conditions and specific company production routines in structuration.

Sneaker

The sneaker structure that was discussed in chapter 5 aligns with the structuration perspective (Orlikowski 1992) about technology being a product of human action. Just as organizational routines and characteristics influence the use and modification of technology, so too does individual human action (and attitudes). Partially shaped by organizational requirements and partially shaped by their own interests and attitudes, employees largely favor direct communication with each other. This preference for un-mediated social interactions limits the intranet's scope as employees have numerous ways of discussing work tasks face-to-face. Survey and qualitative data support this claim. The phrase "sneaker" structure was inspired by comments from a long-time employee, David, who said that he is more productive when he and his peers go around the mediated environment of the intranet by calling each other and walking into each

other's offices to discuss work topics. This theme surfaced repeatedly in the interviews, and survey data showed that 60% of employees communicate directly with each other when they have questions about the intranet (instead of relying on other internal or external resources). MaxPort's physical context should be addressed, as the sneaker structure may not be as apparent in other organizations. About 75 percent of all MaxPort employees work in one building in the United States, with smaller groups of employees scattered at several international offices. Although the company's products are sold worldwide, the bulk of its operations are in the U.S. and employees are in close physical proximity to each other. This diminishes the need to communicate virtually and further explains the limited need for intranet-mediated communication exchanges. With most teams clustered together (the term "co-located" was frequently used in interviews), it is natural for employees to walk into each other's offices. It would be worthwhile to study this notion of a sneaker structure in companies that have a much stronger reliance on employees who are geographically dispersed.

Problematic Affordance

Returning to Orlikowski's structurational model of technology (Figure 4-2), data may suggest that a technology's limitation encourages greater social interaction among employees because it forces them to troubleshoot technical problems in direct, face-to-face communication. Just as employees' natural preference for interpersonal communication shapes their limited use of technology in some cases, the technology itself has limitations. The intranet's biggest limitation, the search function, often leads employees to ask each other for help. This problematic structure appears to have embedded itself in the company's culture. That is, in expressing a common frustration about the search issue, employees bond with each other. This assists with employee sensemaking and orientation to MaxPort's corporate culture.

Helper

The helper structure at MaxPort, primarily the company's IT team, is responsible for assisting employees when they encounter roadblocks or other obstacles with the intranet. This structure emerges as a standard part of MaxPort operations and it helps allay employee frustrations with the intranet. Additionally, the IT team makes basic modifications to the intranet as requested. In modifying a technological feature, the intranet, team members maintain the spirit or general intent of a technological feature (DeSanctis & Poole, 1994). The technological system is reified through its own adaptation. Team members benefit when they gradually customize a technology, and thus the technology's primary goals (in the intranet's case, information sharing) can be met. The company also relies on specially trained employees who are known as intranet points of contact, or IPOCs, for each team. Survey and interview data both revealed that regular employees have minimal to moderate awareness of their team's IPOC. This is a critical management issue.

This description of the helper structure supports existing information management literature that intranets are complex systems that require constant maintenance and monitoring (Cozijn et al., 2007; Edenius & Borgerson, 2003). However, structuration scholars have not previously recognized the role of organizational support structures in managing technology in organizations. This structure is crucial for helping organizations maintain the spirit of a technology while adapting the technology to the organization's unique needs. MaxPort appears to successfully rely on this structure since intranet site use remains high (Figure 4-1) despite employee frustrations with it. Yet just as the clustering of MaxPort's employees in one primary location helps explain the sneaker structure, further aspects of MaxPort's operation influences the helper structure. The company was founded several decades ago and, over the course of the last two decades, has developed a strong information technology support network. The company's

primary products are technology-related, which means that it is their business' interests to have the technological capabilities to quickly troubleshoot information systems problems. At MaxPort the support structure is formal and has significant company support. With social media being deployed at such a rapid pace in other areas of industry, the effects of the helper structure may not be as strong at companies with less-developed IT infrastructures.

Emerging Perspectives on Social Media and Work

A contribution of this study is the examination of employee attitudes toward technology outside of the work context from a structuration perspective. The ways in which an employee views technology inside the workplace is influenced by their attitudes toward comparable forms of technology outside of the workplace. As argued in chapter 4, the perceived differences between at-work social media use and at-home social media use are nuanced. A limited segment of the interview sample sees social media and information use in the two venues as quite comparable. Several interviewees indicated that the commonality is in information-seeking: Regardless of the information source, people engage in a form of environmental scanning or surveillance when they check their social media profiles at home and when they check information/technology sources at work.

Returning to structuration theory and building on this discussion, I make a further claim that scholars need to understand people as holistic media consumers. In both at-home and at-work situations, there are subtle sanctioning patterns that legitimize some activities and de-legitimize other activities. Despite the different venues, legitimization and de-legitimization happens with respect to all social technology. (This point is clear from the material that is presented in Tables 4-2 and 4-2.) These patterns appear to develop mostly in response to company-sanctioned activities. Outside research shows that social media use varies considerably by age (Duggan &

Brenner, 2013) and it is therefore tempting to draw inferences about attitudes toward social media use in the workplace based on age. At MaxPort, there is a strong, yet tacitly expressed undercurrent of frustration about social media use being a disruption at work. At least three of those employees who were most vocal in their criticisms had extensive professional backgrounds and were above the average interviewee age. Several younger employees also want to see private social media use be either constrained by the company or limited by employees themselves.

Related to this, a near company-wide perspective was voiced that MaxPort is a good organization to work for and external evidence such as industry awards support this claim. As noted earlier in this chapter and in chapter 6, all relationship quality indicators that are commonly used in the public relations literature were high among employees. Employees across the board have a high level of trust, (positive) relationship control, satisfaction, and commitment. It is concluded that these subtle rebukes against social media at work—what is essentially social media's de-legitimization in the workplace—are grounded in employees' concerns for the entire company's well-being and overall mission. The null findings from the survey can be explained by pre-existing and favorable attitudes toward the company that technology use simply cannot influence.

When it comes to legitimizing social media, the study's qualitative data revealed a generally positive attitude toward internal blogs. MaxPort has customized its intranet through blogs and has added social content to its intranet that most employees consume but do not create content for. Several prominent examples demonstrate that blogs as a social media tool can enhance work-related efficiency. Because this tool contributes to task completion and the company's overall product development, the blog is seen as a viable, and therefore sanctioned, social media technology. Left open to further consideration is the degree to which technology deployment in organizations influences attitudes toward social media. MaxPort is just introducing social media for work and does not have a fully developed or fully utilized employee profile

system; the company also does not rely on wikis or microblogging platforms such as Twitter. Employees at a company that has already deployed these social technologies might have more favorable attitudes toward social media in the workplace.

In summary, MaxPort does not appear to be an organization that encourages self-expression and by extension, social media use between the realms of home and work are markedly different. Several key discussion points from this study can help refine theory in the area of organizational communication and structuration theory. While not voiced by all respondents, employees appear to engage in a careful self-selection of peers to follow in private social media. Recall that one respondent, quite strongly, believed that it would be “Big Brother like” if they were friends with a large number of MaxPort co-workers on Facebook and if most employees learned about each other’s non-work (private) activities via social media. Other respondents made similar points about being cautious with respect to who they friend or follow on social media. Interpersonal friend networks are kept relatively separate from peer work networks. Certainly, the claim is not that these two worlds are entirely separate. A few interviewees who use sites like Facebook and Twitter said they do have co-workers on their friend lists. Several respondents also mentioned being socially active with several work friends outside of the MaxPort office setting. However, interview data strongly suggest these interactions are tightly controlled and there is a desire to maintain little overlap between the two settings. That MaxPort employees seek to maintain such distinct borders between these two areas speaks to a refined conceptualization of work-related socialization.

In organizations that have such strong employee views of the company, concerns about the greater good can trump the desire for individual employees to express themselves. This explains the employee’s comments about it being “Big Brother-like” for her to be friends with most of her coworkers. There is a small degree of concern felt by employees about their private lives being monitored by their peers and the organization. Although it was a dramatic example,

recall that another employee said she would not want her officemates to know if she went out to a bar on a Friday night. Other anecdotes and interview data incorporated this idea that since MaxPort is such a small and intimate company, employees seek to maintain a division between work and home social media interactions because of privacy interests.

Related to this idea, the across-the-board positive ratings of control mutuality, satisfaction, commitment, and trust reflect employees' appreciation for their work environment, and also speak to employees' desire to see MaxPort grow as a company. When asked what corporate values were dominant at MaxPort, employees in interviews often relayed, verbatim, the list of official corporate principles that appear in the company's literature and throughout the main building. Although the survey did not specifically ask to what degree do employees identify with the company, qualitative data paint a clear picture that many of MaxPort's values align closely with employees and their expectations for work. MaxPort seeks to find the right employees to fit into the broader corporate context (see, as evidence, the prior discussion about the rigorous interview process) and this results in positive attitudes toward the employee-organization relationship, and by extension, mindfulness by individual employees that distractions at work are not acceptable.

There are clear implications of this management approach and these employee attitudes for social media in the workplace. Despite the promise for enhanced two-way communication, the majority of employees understand they are just consuming content, as opposed to creating internal news content. As one international employee said of MaxPort's intranet, "I don't feed Net-Source with information. Net-Source is feeding me." Supporting this idea, survey data tell a startling story. Most employees reported not contributing any sort of intranet content. The survey included a two-item variable of contributing social content. In the seven days before completing my survey, employees, on average, reported that they produced a piece of social content just .04 times (Table 4-2). As noted earlier, employees rarely personalize their profile pages. Such little

personalization of profile pages and employee-generated content speaks to MaxPort's centralized management approach and to the lack of self-expression. It is an environment that precludes non-task related socializing, which therefore limits social media's role in the company. There are *some* examples of positive social media use, but these examples were nearly all focused on task competition. The lack of employee-generated content (and employee profile site use) can be explained by the context at MaxPort and the company's management practices.

When it comes to structuration theory, structures of legitimation gain additional strength, exert stronger influences, and are reified when there is awareness by employees that the organization comes first. Technology that is more task-oriented appears to be more heavily favored, used, and company-supported than technology that is more social in nature. This distinction of task and social dimensions of technology fits into prior literature. This study also makes a contribution by suggesting that both an organization's philosophy and the size of the organization can be two crucial factors in determining the degrees to which social and task-oriented technology are supported within organizations.

Two Technology Models

This section revisits two models that are an important contribution of this dissertation. Orlikowski (1992) proposed one model (Figure 4-1) and the other model is a contribution of this study (Figure 7-1). Both models address technology in the workplace.

The structuration model of technology is in need of a reboot. I have identified four structures at MaxPort that relate to Orlikowski's (1992) original model, and these could be investigated with other companies. These structures paint a more complete picture of organizational communication and are essentially heuristics that highlight the exact aspects of organizational life that impact company-wide and intra-employee communication. Given the

complexities of today's intranet, scholars should continue investigating the impact of specific dominant affordances (be them harmful or productive) on employee attitudes and behaviors. The sneaker structure, with its focus on the clustering of employees in nearby offices and employee preference for face-to-face communication, also suggests opportunities for future research. This study made clear that the intranet has not replaced direct employee collaboration and the potential to do even rival face-to-face communication as a preferred communication channel is also limited. For all of technology's benefits, this group of employees at MaxPort still sees face-to-face communication as the most effective means of interacting. The recent professional literature (Holmes, 2012 a & b) demonstrates that preference for face-to-face communication is changing and a company with a younger workforce would likely demonstrate stronger overall preferences for mediated communication.

In light of the patterns of interaction with technology that employees describe and that are analyzed throughout this study, a new model for patterning intranet use within organizations is now offered. This pattern appears to be fairly common at MaxPort and it warrants additional consideration. Upon analysis of interview data, five linear steps typically occur with respect to learning about the intranet and adapting the intranet (Figure 7-1). The company provides initial SharePoint training when employees are first hired. Interviewees described a process in which they explored the intranet on their own before they were immersed in time-intensive work projects. Interviewees also discussed receiving training from the company. For example, with the goal of orienting them to the intranet's search function, new employees participate in a scavenger hunt that has them seeking out specific items in the intranet. Once initial orientation and training is completed, employees begin to incorporate the intranet into their regular work routines.

A small amount of customization occurs in the second phase. Some employees use their personal intranet profile to save important intranet links and in very limited circumstances, employees post personal information to their profile pages. In most cases, this customization is

work focused and customizing to reflect one's personality or outside interest is largely an afterthought. Still, in the early stages of one's time at MaxPort, an employee learns how to use the intranet, learn about the company culture from the intranet, and begin to make initial modifications to suit their developing work routines.

The third step in this process involves adjusting employee expectations for the intranet. This model adds an extra step to Orlikowski et al.'s (1995) patterns of communication mediation and technology. Like Orlikowski et al., I hold that an adjustment period occurs in technology use by employees in organizations. However, data from this study suggests that employee adjustment appears in two phases, not one. The first adjustment involves changes to either an employee's role or their expectations for the intranet. At some point, employees take on new duties or change work teams. This can take place immediately or over several years. The other employee-centered adjustment occurs with respect to their attitude; employees either develop positive or negative views on the intranet that strongly influences their intranet use. This third-stage of changes happens with behavior (new work roles) or attitude (changed belief in the intranet's function). A change with the employee should influence their intended intranet usage. Employees either learn more about how the intranet functions as they are transferred to new work teams or duties (expanding the scope of the use) or they grow frustrated with the site and make only limited use of the intranet. Regardless of the type of change, *some* change occurs roughly as a midway point in the intranet learning cycle that influences how they adapt the technology to their long-term work needs.

In emerging from this third stage adjustment in either attitudes or work roles, employees seek help or seek advanced training at the fourth stage of development. This happens both formally through additional intranet training and consultation with the company's IT staff or informally through consultation with employees' peers. Regardless of whether this is formal or informal, this help-seeking stage occurs after the employee has experienced some initial

adjustment in their intranet use. Employees, after orientation and initial adoption of the technology, begin to incorporate the technology into their work routines. They seek help when they attempt to maximize site use.

The final stage in learning about the intranet and incorporating it into sustained work routines involves adaptation. With additional experience at work and a stronger awareness of the intranet's strengths and weaknesses, employees learn to incorporate other technologies into their regular work routines. At MaxPort, for instance, several employees reported using customer relations management software and additional word-processing tools such as Microsoft's OneNote. These new technologies work in concert with the intranet's various technical tools. Another example of adapted technology use at MaxPort is the company's internal blogs, which have emerged as a supplemental means of communicating important information about work tasks. From the vantage point of structuration, this fifth adaptation stage is more company-dependent and is therefore sanctioned. As employees develop their own individualized work routines through adapted use of the intranet, they rely on company-supported technology modifications and supplemental communication channels.

Applying this Study's Findings

In an attempt to extend theory beyond MaxPort, four conclusions are offered that can guide future research. These ideas have emerged upon a synthesis of interview, survey, and corporate data. Although MaxPort's unique circumstances and company characteristics influenced study findings and the descriptions of individual structures, this section looks at how these data and conclusions can be applied to studies of other companies.

1- Consistently occurring de-legitimizing and legitimizing patterns influence social media use by employees regardless of the venue. A recent literature review by Treem and

Leonardi (2012) and a scan of the trade literature makes the case that social media deployment is inevitable in the workplace. Findings from this study paint a more complete picture of the evolution of social technologies in the workplace. However, I further make the claim that such optimism should be tempered. This evolution is driven by organizational pressures such as employees' desire to not let social media interfere with productivity and the organization's unique characteristics. Related to this, employees' outside use of social media in the workplace is subject to subtle criticism. Both of these influences are socially mediated and social -negotiated through interactions among employees.

These patterns of legitimization and de-legitimization are important for predicting how social technology will be utilized in the workspace. Regardless of the context, certain patterns of sanctioning occur with social media. Certain types of behaviors are condoned, while others are questioned. Employees appear mindful of these judgments and alter their behavior in response. Criticism does not have to be direct for de-legitimization to occur; a comment made in passing by a peer or an employee's own sense of what is allowed may be enough to curb social media behavior at work. Outside of work, other pressures are exerted. Related to this, employees prefer to keep their work friends largely separate from their non-work friends; social media such as Facebook are the venues for this separation. Private social networks are monitored to such an extent that there is limited crossover between work and home. Structuration theory suggests that this sanctioning and de-legitimizing occurs primarily with respect to organizational behavior. This study advances structuration theory by showing how these legitimizing behaviors exert influence in two interrelated venues of home and work.

This discussion points to several propositions that can be tested in future research. For example, the more favorably someone views social media in the workplace, the more likely they will be to have a large number of work associates as friends in their private social media.

Conversely, the less favorably someone views social media in the workplace, the less likely they

will to have their work peers as friends in private social media.

2- Technology overexposure limits work technology's effectiveness. With the proliferation of portable and easily accessible work and personal communication devices, people, as holistic media consumers, may need a break from technology. In light of research that shows the average U.S. adult consumes more than 11 hours of media each day (EMarketer.com, 2012) and this dissertation's findings, I argue that technology overexposure encompasses several aspects of the work-life balance. Social technologies are pushing their way into the workplace, which is potentially a positive development. Increased collaboration, enhanced direct team communication, and facilitated organizational meaning sharing are all benefits of tools such as wikis, blogs, and even outside personal media such as Facebook.

Yet these benefits countered, somewhat, by employees' lived experiences with technology. In using a computer all day long at work and then using smartphones and other devices at home, MaxPort employees often seek to disconnect from their devices when they can. This helps explain why employees maintain a careful balance between their at-home social media friends and their work colleagues. With constant exposure to technology, employees seek to draw lines between their work and private media lives. Organizational work routines and constraints (as demonstrated by the current culture structure) appear to dictate how and when employees check their work email from home. If we consider this organizational routine structure in the light of constant technology use, we can understand why employees do not want to work from home. Questions about technology use and avoidance should be addressed in future studies because it applies to a broad range of employee age groups. Several interviewees who were the most fervent in their avoidance of technology outside of work were in their late 20s and early 30s.

The impact of this technology overexposure is most directly observed in respect to the intranet. At MaxPort, the intranet is one tool of many that employees utilize for their work tasks. Instinctively, employees experience feelings of frustration when they encounter difficulty in

searching for documents on the intranet. This oversupply of documents is a natural function of intranets (see chapter 2's discussion about the difficulty in intranet management) and the growth of MaxPort as a company. As new employees have joined the company and as the firm has grown in recent years, so too has the number of documents that are available on the intranet. The large number of documents burdens intranet searches, which heightens this concern about the intranet's functionality. This discussion suggests that this concern is elevated by employees' overall technology fatigue. In other words, a general desire to avoid technology because of technology overexposure is often manifested in feelings of frustration when employees cannot find the right document via the intranet.

Although Sinclair and Vogus (2011) suggest that social media provide a low level of restrictiveness for users and a low level of sophistication that enable new social structures to emerge, this idea should be challenged. Social media are actually complex systems that further complicate our work lives because formal and informal rules for social media use in the workspace are just developing. Existing work structures are becoming reified and social order is re-established as employees and employers begin to make sense of social media at work. Social media are driving new forms of social system communication and thus our understanding of social systems is evolving. I counter Sinclair and Vogus by arguing that even though we may find social media intuitive from a usability standpoint and we often interact with this technology, social media is problematically one aspect of our overall media diet that contributes to an emerging fatigue.

Findings from this study also suggest that the notion of user-generated content at work should be reconsidered. Although one major sanctioned and positive use of social media and user-generated content for work was discussed earlier—blogs— not all MaxPort employees utilized this tool. Supporting this idea, those who wrote blog posts see little similarity between work blog posts and private social media content contribution. Few employees customized the

intranet's "MySite" tool with personal information and few employees reported an interest in seeing personal information posted to public workspaces. Survey data and interview data both support this idea. Data also reveal that employees consume more socially oriented content than they create. Two-way communication means sharing ideas in informal information workspaces and private offline communication, but intranet content creation is limited.

3- Recent developments with corporate intranets both facilitate and hinder internal communication and internal relationship building. This study also points to several new avenues for research about employee communications, which is comprised of four activities: Internal line manager communication, internal team peer communication, internal project peer communication, and internal corporate communication (Welch & Jackson, 2007). Although the statistically measured relationships between an employee's technology use and relationship outcomes were tenuous, qualitative data raise several questions about each of the four internal communication activities that were discussed by Welch and Jackson (2007). Foremost, this study explains how small-to-mid sized companies that emphasize strong organizational commitment see only limited benefit from sophisticated internal communication programs.

MaxPort's employee communications efforts are limited to regular news updates to the company's intranet and are generally handled by one or two employees. The company appears to have a strong control over internal branding. At 300 employees, MaxPort is small and therefore internal promotional messages are easily conveyed from management to employees. The limited contribution of employee-generated content to the intranet is not surprising; there simply is no desire for employees to express themselves and not much willingness by management to cede control over internal branding to employees. In spite of the limited nature of employee-generated content at MaxPort, larger firms are capitalizing on this content. Examples can be seen in Treem and Leonardi's 2012 review of the literature and a cursory Internet search. It stands to reason that there will be differences in firm size, the amount of employee-generated content, and employees'

relationship with their employers. Future research should more pointedly explore the effects of social media on employee communication and internal branding in small to mid-sized firms.

This study also demonstrates the effects of recent technological developments on peer-to-peer communication and team communication. Several blogs facilitate team communication and team functioning, and this study demonstrates the specific ways in which blogs can be used to spread knowledge among teams and employees. Blogs are ideal venues for information exchange among peer groups and can facilitate project troubleshooting. This represents a positive development. However, this study also shows that significant productivity and team-peer and peer-peer communication problems relate to the size of the intranet. Intranets are massive document storage systems and this research points to a need for companies to engage in continuous system maintenance to purge old and outdated documents. Earlier in this chapter I argued that a crucial aspect of structuration at MaxPort, the helper structure, receives formal company support and MaxPort's background in technology helps the company naturally troubleshoot intranet problems. One cannot overlook that even with this support structure, team communication and project work suffers when employees waste time searching for the right documents. In MaxPort's particular case, data from this study suggest that the search issues do not appear to significantly damage the employee-organization relationship. However, this could be a pressing issue for other organizations that face similar search intranet management problems.

4- Effective management and organizational support structures can overcome intranet management and technology fatigue challenges. In discussing how this organization (MaxPort) has its own set of dominant patterns and sanctioning structures with respect to organizational behavior, findings regarding organizational communication and structuration are for the most part consistent with prior literature (Orlikowski, 1992; Orlikowski et al., 1995; Sinclair & Vogus, 2011; Vallaster & de Chernatony, 2011). This study extends structuration through the discussion of the difficulties that are associated with information and document

management, which is an oft-cited study in information systems. The helper structure at MaxPort is both formal and sanctioned; employees are encouraged and expected to use the company's information technology team. These interactions are negotiated and balanced between the IT team's time resources and the organization's overall financial resources. Customization of the intranet, troubleshooting, and adaptation are enabled through the allocation of company resources. More often than not, the company's IT team and training are seen as the means of coping with the large number of documents and tools that the intranet affords. Employees are expected to utilize these formal corporate resources.

When regular employees encounter problems with the intranet, they consult an informal resource, their peers. These interactions are often brief and involve easy questions. These interactions are also pro-social because they foster informal, interpersonal communication exchanges between co-workers that can extend to topics outside of technology use. This facilitates sharing of meaning and encourages socialization, particularly with newly hired employees. Even though employees are constantly exposed to technology and they may seek to unplug from technology, the right corporate management approach can foster productive technology use. MaxPort encourages employees to bring ideas forward to management and their peers, and to openly communicate. As a result, employees feel at ease in asking their peers for help when it comes to the intranet. One statistical test showed a moderate relationship between group work and trust in the organization (**Table 6-7**). MaxPort management also creates an atmosphere that employees perceive as highly favorable, supportive, and conducive to ethical and well-intentioned work. This environment provides access to both formal and informal resources that enable employees to effectively use technology, and these resources help employees overcome technology's limitations.

This study demonstrated how technology effectively helps with meaning sharing across large geographic distances. Recall the example from chapter 5 about Zumba; employees learn

about social and work activities that occur in international offices from the intranet. This facilitates the sharing of information and consumption of internal corporate culture in multiple venues. Although employees in the U.S. office appear to prefer consulting each other on specific work questions, the intranet is a key resource for communication between employees in geographically dispersed offices. Thus, there are multiple pro-social effects from intranet use, as it is a helpful tool for employees to get to know each other and to understand what their peers in other offices are working on.

Study Implications

This last part of the chapter discusses this dissertation's implications for managers and intranet programmers, employees, and scholars. These three perspectives are worthwhile to consider because the first two groups are likely to interact with social intranets on a daily basis. The latter group, scholars, may be interested in the theoretical aspects of this study.

For Corporate Managers and Intranet Programmers

The legitimizing and de-legitimizing patterns that occur with social media at work have significant implications for corporate managers and intranet programmers. It was demonstrated that social media are sanctioned and criticized in two contexts, social media for work purposes and personal social media at work. Despite the best intentions of managers to provide official corporate training and support, employees often turn to informal sources for help such as their peers. Peer support structures that are reified through informal discussions between co-workers are often as important, if not more important, than company and software-producer provided help tools. Companies should consider providing ongoing software training and they should also

identify those unofficial peer leaders who are most instrumental in orienting people to work and task-related technology.

Evidence in this study suggests that companies that adopt internal social media at a late stage or who have employees who are reluctant to use technology can benefit from this technology. Deploying social media at work is a matter of managing expectations for this technology, having a well-established set of internal communication practices (as MaxPort does), and recognizing that not all employees will see the benefit or point of social technology. Managers and intranet programmers should also recognize and address technology fatigue, which is a phenomenon that was frequently evidenced through qualitative interviews. With the average American using media for 11 or more hours per day, introducing technology that's even more complex or mental resource-intensive into the workplace may have an adverse impact on employees. Managers should be mindful of this issue regardless of how much technology their employees use and offer exercises and projects that encourage face-to-face collaboration on a regular basis.

For Employees

There are two primary implications of this study's primary findings for employees: Their peers' perceptions of their technology use and how they can overcome intranet search difficulties specifically and technology overuse generally. At a fundamental level, interpersonal employee communication is shaped by organizational context. Employees' relationships and interactions depend on how organizations are managed and how technology is structured through social negotiation. It is important for employees to be mindful of this context, and it is also critical for employees to be aware that their use of technology will be influenced by and will influence their peers. One's peers may negatively perceive their use of private social media at work, and

employees who access these websites and applications at work should exercise discretion to avoid problems with their peers.

When it comes to overcoming intranet challenges, employees should recognize that their peers are often the best guides. Internal knowledge sharing rivals formal technology guides and corporate instruction in terms of value to many categories of employees. MaxPort successfully demonstrates employee-to-employee troubleshooting on intranet issues. Employees elsewhere can identify and draw upon the experiences of their most knowledgeable peers for help in addressing intranet-related questions. Also, informal and unmediated interpersonal communication during the workday helps employees cope with technology overexposure. It seems obvious, but a quick break from technology during the day can help reduce technology fatigue and give employees an outlet to informally brainstorm and share ideas.

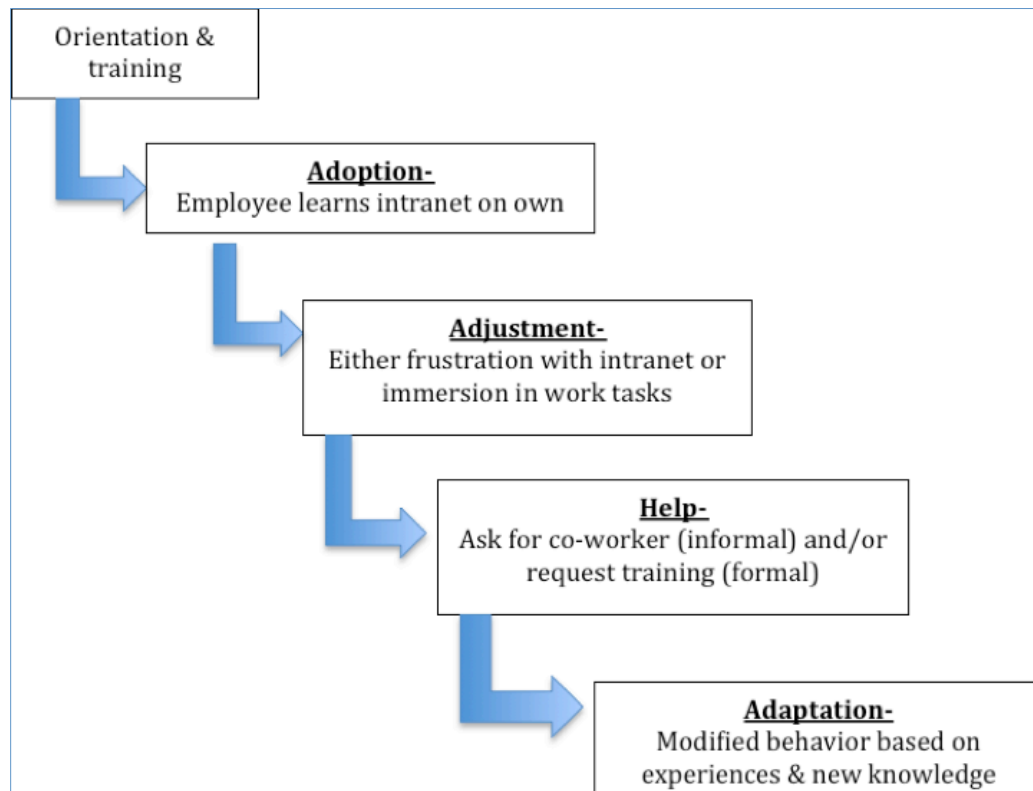
For Scholars

As structuration theory would lead one to suspect, technology at MaxPort has evolved as the organization itself has changed. With the addition of dozens of new employees in recent years, the complexity of MaxPort's intranet has likewise expanded. Several theoretical questions emerge from this study. It would benefit the literature if future scholars examined the relationships between employees' use of formal work "helper" structures (company manuals, training) and informal helper structures (peer feedback, outside Internet sources) and employee perceptions of internal technologies. I hypothesize that those employees who more frequently consult informal helper structures will have more favorable views on technology than those who rely on formal support structures. The logic here is that use of informal structures may mean employees can have their questions answered more rapidly than the use of formal structures. With structuration positing that social systems exist through the reproduction of social practices

(Giddens 1979/1984), social systems necessarily should evolve as social communication evolves. Much remains to be explored with respect to the social sanctioning of social media in the workplace.

This study also suggests a weak to non-existent link between technology use and employee attitudes toward their employer. Extending this idea, industry commentaries concerning employees demanding social media at work are perhaps overstated. While the small survey sample (N=72) likely was a primary reason for null survey findings, these results do point to matters to revisit in future research. Chi-square tests showed a marginally statistically significant relationship between group work and trust. More people than anticipated who did not do group work had low satisfaction scores, whereas more people than anticipated who did group work had higher satisfaction scores (**Table 6-7**). This reveals that of the four relationship indicators, at least organizational trust varies with employee technology use. More research, likely with a larger sample, should investigate the degree to which group-focused technology use influences trust. It is possible that those employees who do more group work feel better a stronger connection to their peers, and therefore have more trust in the overall organization. The other three indicators (control mutuality, commitment, and satisfaction) do not appear to be influenced by use of technology.

Figure 7-1. A new model for the typical stages in learning about a corporate intranet.



Chapter 8-Conclusion

The academic and technology industry literatures are divided with respect to the introduction of social media into the workplace. Concerns have been raised about the impact of social media on productivity and intellectual property (Conner, 2012; Kelleher, 2011; Shewchuk, 2010). This is countered by studies and commentaries that suggest employees expect social media at work (Holmes 2012a& 2012b). Regardless of one's perspective about them, tools such as wikis, blogs, and personal profile pages are becoming more commonplace in the workplace. This is a trend that is not likely to end, and to a large extent, organizations are confronting challenges with social media's integration into the workplace. These tools are interfacing with intranets, which is shifting the intranet's role from a document management system to a facilitator of organizational meaning sharing and social exchange. Making intranets more social will increase their complexity, and this may pose problems for employees who are either uncomfortable with using new technology or simply have limited interest in digital collaboration and content contribution. A legitimate question emerges in light of this study: How much social media do employees want in the workplace? The answer is complex, and as it has been argued, there are pro-social and harmful aspects of this technology in organizations. This chapter includes a short review of the study's two primary limitations, implications for future research, and concluding thoughts.

Study Limitations

As discussed in the methodology chapter, I encountered some minor difficulty with the survey distribution and survey response rate. I did not want to burden my MaxPort contact and the company's employees. In the summer and early fall of 2012, the company was in the middle

of a calm cycle. I had ample access to members of the organization. With the exception of two employees who were unavailable, all interviewees had enough time during the business day to speak with me. However, the company entered a busy period in the late fall of 2012 when I administered my survey. Company liaison Jennifer posted two items to MaxPort's SharePoint portal about my survey. As I address in chapter 6, only one of my statistical tests resulted in significant probability values, and I suspect my limited survey sample ($N=72$) was one possible reason. Had more employees completed the survey (with stronger prompting from management or with additional awareness of the study), I would have had a more robust sample, and I therefore assume my tests would have yielded more powerful results. This is a simple reality of conducting organizational studies; a company may limit a researcher's access as organizational exigencies emerge.

Although Jennifer made two posts to the intranet on my behalf about the survey, I question the effectiveness of those posts. That no one from the company's international offices took the survey strikes me as limiting for two reasons. Either employees were worried about how I would maintain the confidentiality of survey responses or the international staff did not see the original posts. The former concern can be expected in a company the size of MaxPort; at around 300 employees concern about being identified was reasonable despite my reassurances (indeed, privacy issues were discussed with respect to social media in the workplace earlier in this study). The other concern relating to the limited survey response rate—international employees not seeing my survey information— speaks to how employees access the intranet. Although not a major point of discussion in this study, the interview data suggested international employees do not always read the main intranet news page. Despite this limitation, a section of chapter 5 addressed international employee use of the intranet, and their perspective was included in this study. I acknowledge that the survey data failed to demonstrate statistically significant relationships between technology use and the employee-organization relationship. The findings

call into question the degree to which technology use may impact an employee's views on their employer. Still, qualitative data do point to some relationship between these two concepts, and future research conducted with a different company might show statistically stronger correlations. An issue might have been the survey instrument. Shortly after I completed survey data gathering, I discovered a 15-item checklist from Murgolo-Poore et al.'s (2002) that measures intranet effectiveness. Utilizing previously validated measures for intranet use may have helped with my survey, even though it can be pointed out that Murgolo-Poore et al.'s survey was geared toward public relations professionals.

A final matter worth mentioning is the organization itself. Interviewees had worked for MaxPort, on average, for 8.9 years and survey respondents had worked for the company, on average, for 7.2 years. MaxPort can be considered an "older" company, and this may have played a major role in influencing the dominant (and sanctioning/un-sanctioning) attitudes toward technology at the company. A company with a younger employee base might have more favorable attitudes toward technology, and I suspect that there would have been stronger statistical relationships among my study's quantitative variables. These limitations were mitigated to some extent because of the wealth of data that were gathered from interviews, the survey, and the company. The company, as noted earlier, is several decades old and has a well-developed information technology support system. This strong IT infrastructure explains the strength that the 'helper' structure exerts at MaxPort. The co-location of employee desks likely enhanced the impact of the 'sneaker' structure at MaxPort, as well. As with any case study, the researcher sacrifices a degree of generalizability for the access to one particular organization or set of phenomena.

Directions for Future Research

Building on the work by Orlikowski (1992), Witmer (2000), Cozier and Witmer (2001), this study reinforces structuration theory's potential to explain technology use and adaptation in organizations and digitally mediated organizational communication. From a methodological standpoint, future research could draw upon panel data to examine how employee attitudes toward technology change as the technology is introduced, modified, and reified over time. Through qualitative interviews asked respondents to reflect back to their prior experiences, I demonstrated that employees' intranet and technology use shifts the longer they work for a company. Utilizing panel data over several months or years would give scholars a more direct method of documenting this transition. If scholars have the opportunity, the literature would also benefit from studies that examined employee attitudes toward their employer and technology in general before the deployment of a significant tool such as blogs or wikis and immediately after the deployment of such tools. Such a study conceivably would give researchers a more direct insight into interactive technology's specific effects.

Related to study design, case studies take many forms and can include examinations of phenomena in multiple contexts. The present study qualifies as what Stake (1994) labeled the "collective case study." Social media deployment by organizations appears to be happening at different speeds. Some organizations, such as IBM and Intel, have well-developed social and interactive intranets (Treem & Leonardi, 2012). Still, many organizations are currently developing and deploying these advanced systems. MaxPort has a robust intranet and has made initial use of social media for employee communication. It would be interesting to compare multiple companies in a single case. We also might see differences in technology use and technology sanctioning patterns with multiple companies of similar size that are in different industries.

Related to these ideas, this study points to the criticality of the organizational setting in determining the effects of technology on employees' relationships with their company. In many ways, this study counters most common perspectives about social media's role in organizations and the growing perception in the business world that social media *must* be offered by today's modern company. It should be pointed that MaxPort has its own organizational idiosyncrasies. Employees enjoy working for the company, even as several dominant organizational structures preclude people from expressing themselves via social media. As I have shown, there are strong organizational pressures and mutually reinforced employee preferences for face-to-face communication and task work that is not mediated by technology. To a major extent, MaxPort's struggles with intranet management are in line with other companies. However, this company's characteristics exert influences on technology use (specifically social media use) in several unique ways. Multi-site case studies that compare several companies' size, management approach, and information systems might be beneficial for the literature.

A final point is made with respect to individuals' overall use of media. Consumers/employees use media in multiple contexts throughout the day and this continued media consumption ostensibly influences their perceptions and behaviors relating to technology. Human computer-interaction scholars who conduct experiments with individuals' experiences with technological affordances can control for the amount of media use and organizational scholars likewise need to account for individuals' personal media behaviors.

Concluding Thoughts

Using multiple forms of data in a single case presented an ideal opportunity to engage in data triangulation and a rigorous data analysis process. This study provides a glimpse into the extensive effort that goes into maintaining an intranet and provides clues as to how organizations

can encourage effective technology use and employee collaboration via digital platforms. The structures of legitimation and the structures involved in internal technology use are socially mediated phenomena that are of value in understanding organizational behavior. The four structures that I identified in this study—and other structures that can be discovered through additional research— can shape how scholars and communications professionals view technology in the workspace. Intranets indeed are crucial internal communications channels. Yet they also are complex and dynamic document management systems and adding social tools has the potential to both enhance them and frustrate employees.

I agree with Bennett et al.'s (2012) arguments that there is a steady push to bring Web 2.0's participatory media culture to the workplace. Given their pervasiveness elsewhere in society, social media are inevitable work productivity and work socialization tools. In short, "Intranet 2.0" is here to stay. The rules involved in workplace technology sanctioning are changing dramatically with social media. With so much still to be understood about these sanctioning patterns and social media's exact fit in organizations, optimism regarding social media at work should be kept within reasonable boundaries. Many successful cases of social media in organizations involve large, resource-rich companies (Treem & Leonardi, 2012). MaxPort's experiences are representative of many small to mid-sized companies today: Social media *can* benefit employees and companies provided certain organizational conditions are met. Successful social media integration into the work environment requires a significant commitment from both employees and the company, and it requires a high-functioning and well-developed set of organizational communication practices that exist before social media are used.

Appendix A- Interview Questions

Begin by asking about their background and their relationship with MaxPort:

What is your role with MaxPort?

How long have you worked for MaxPort?

Expectations for technology use

How do you use technology at home?

*What about Twitter, Facebook and other social media?

*Do you submit content to these sites or just read?

Please describe what you use MaxPort's intranet site for.

How often do you use it for project collaboration?

Could you please describe the last time you used the site?

Prompt: Do you primarily read or primarily submit content?

How often do you use the site's bulletin board function? Do you post any personal information or non-work thoughts?

Could you compare your use of the intranet site with your outside social media use?

Do you see any similarities? What are the principle differences?

Initial adoption of technology

Describe SharePoint in your own words.

When you first started work at MaxPort, what site features did you first use?

Prompt: Please describe this.

How did you learn about using the site?

Did you have any peer mentors who helped you learn about the site?

If you had technical questions or concerns, who helped you the most initially?

*Why do you think MaxPort offers these tools?

*What do you see as the primary purpose of these tools?

*Can you please describe that initial learning process?

Adapted use of technology

As you've worked at MaxPort, how has your use of the intranet site changed?

Do you see your use as aligned with what the company expects?

What work roles have made you more or less willing to use the site?

Has the intranet site improved or hindered your productivity?

Prompt: Please describe a situation in which productivity has been impacted.

Are there roadblocks to you submitting content?

Prompt: Social media outside of work seems to rely on networking. How do you network within MaxPort?

If you submit content to the intranet site, why do you do so and has this changed since you started working at MaxPort?

Prompt: Please describe these experiences.

Can you describe any creative aspects to the intranet site that may not be seen with non-work social media? In other words, beyond just writing and submitting content, what else can the site be used for?

Compared with organizations that you've worked for, what are the greatest strengths of MaxPort's internal communication sites?

Compared with organizations that you've worked for, what are the greatest weaknesses of MaxPort's internal communication sites?

How would you describe your relationship with the company?

Following interview questions from PR relationship management theory:

What does it mean for you to work for this organization?

How much do you identify with your organization's goals and values?

How long would you like to maintain your membership with this organization?

Appendix B-Survey

Page 1

1. In the last seven days, how many times have you used Net-Source to:
 - ☐ Schedule a meeting
 - ☐ Check who is visiting the building
 - ☐ View the company's financial/sales information
 - ☐ Access the HR policy manual
 - ☐ Read company-wide news items
 - ☐ Read updates about your specific work group
 - ☐ Update an existing work document
 - ☐ Upload an entirely new work document
 - ☐ Collaborate directly with members of your work group
 - ☐ Collaborate with employees who are not on your work group
 - ☐ Update the progress of your work projects
 - ☐ View the progress of fellow team members' work projects
 - ☐ Schedule/request time off from work
2. Please briefly describe any other typical uses for Net-source. (Open-ended)

Page 2

3. In the last seven days, how many times have you used Netlife to:
 - ☐ Read written information about a company social event (e.g., blood drive, fitness class, or potluck)
 - ☐ Post written information of your own about a company social event
 - ☐ Look at photos about a company social event
 - ☐ Post photos of your own about a company social event
 - ☐ Read information about an item being sold or given away by a co-worker
 - ☐ Post information about an item that you would like to sell or give away
 - ☐ Read information about an outside service, store or product that a co-worker has used
 - ☐ Post information about an outside service, store or product that you have used
4. Please briefly describe any other typical uses for Net-source. (Open-ended)

Page 3

5. In the last seven days, how many times have you:
 - ☐ Read material that was posted by someone else to Facebook
 - ☐ Submitted material of your own to Facebook
 - ☐ Read material that was posted by someone else to LinkedIn
 - ☐ Updated your own LinkedIn profile
 - ☐ Read material that was posted to Twitter
 - ☐ Submitted your own tweets
 - ☐ Read material that was posted to someone else's Tumblr page or blog
 - ☐ Submitted material to your own Tumblr page or blog
 - ☐ Looked at photos posted to Instagram, Pinterest, or Flickr
 - ☐ Submitted photos to Instagram, Pinterest, or Flickr
 - ☐ Checked your social media profiles at work
 - ☐ Checked your work email at home
 - ☐ Spent at least 30 minutes doing MaxPort-related work at home

Page 4

The next two pages ask for your thoughts about your relationship with MaxPort.

6. Please indicate your agreement with the following:

- ☐ The company respects its employees.
- ☐ Employees are happy with the company.
- ☐ The company can be relied on to keep its promises.
- ☐ When the company makes important decisions, it is concerned about its employees.
- ☐ When employees interact with this company, they have a sense of control over the situation.
- ☐ I would rather have a relationship with this company than not.
- ☐ I cannot see that the company wants to maintain a relationship with its employees.
- ☐ I believe the company takes the opinions of employees into account when making decisions.
- ☐ Both the company and its employees benefit from the relationship.
- ☐ Most employees are happy with their interactions with the company.
- ☐ Generally speaking, I am pleased with the relationship the company has established with me.

Page 5

More on your relationship with MaxPort.

7. Please indicate your agreement with the following:

- ☐ Compared to other companies, I value my relationship with this company more.
- ☐ The company really listens to what its employees have to say.
- ☐ The company fails to satisfy the needs of its employees.
- ☐ Most employees enjoy dealing with this company.
- ☐ The company does not have the ability to meet its goals and objectives.
- ☐ There is a long-lasting bond between the company and its employees.
- ☐ I feel very confident about the company's ability to accomplish its mission.
- ☐ The company and employees are attentive to each other's needs.
- ☐ The company does not believe the opinions and concerns of its employees are important.
- ☐ I feel that the company is trying to maintain a long-term commitment with its employees.
- ☐ I believe employees have influence on the decision-makers of the company.

Page 6

Some final questions.

The demographics questions below will only be reviewed by researcher Justin Walden at the aggregate level. I will not identify specific employees by any of the following questions and nor will I share any individual pieces of information with company management. These questions are completely voluntary and you may skip these if you in any way feel uncomfortable.

8. How many years have you worked for MaxPort? (Select year option from Less than a year to more than 20 years.)

9. What is your gender? (Female/Male)

10. What was your age on your last birthday? (Please enter numbers, no text.)

11. Where is your home office? (Select from company-specific choices.)

12. What is your department? (If you belong to multiple teams, please select the team you spend the most time with during a regular work week.) (Select from company-specific choices.)

Page 7

Your participation is greatly appreciated. De-identified survey results will be shared with the company in the coming months.

References

- Azorin, J.M. & Cameron, R. (2010). The application of mixed methods in organizational research: A literature review. *Electronic Journal of Business Research Methods*, 8 (20), 95-105.
- Bandura, A. (2001). Social cognitive theory- An agentic perspective. *Annual Review of Psychology*, 52, 1-26.
- Bandura, A. (2009). Social cognitive theory of mass communication. In J. Bryant & M.B. Oliver (Eds.), *Media Effects- Third Edition* (pp. 94-124). New York: Routledge.
- Bednarz, A. (2011, Nov. 2). Allow social media vs. ban social media at work. *Network World*. Retrieved from: <http://www.networkworld.com/news/2011/102511-tech-argument-social-media-252381.html>
- Bennett, J., Owers, M., Pitt, M. & Tucker, M. (2010). Workplace impact of social networking. *Property Management*, 28 (3), 138-148.
- Berger, B. K. (2008, Nov. 17). Employee and organizational communication. *Institute for Public Relations, Essential Knowledge Project*. Retrieved from: www.instituteforpr.com
- Botan, C. H., & Taylor, M. (2004). Public relations: State of the field. *Journal of Communication*, 54 (4), 645-661.
- boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230.
- Broom, G.M. Casey, S., & Ritchey, J. (1997). Toward a concept and theory of organization public relationships. *Journal of Public Relations Research*, 9, 83-98.
- Broom, G.M., Casey, S. & Ritchey, J. (2000), "Toward a concept and theory of organization-public relationships: an update", in Ledingham, J.A. and Bruning, S.D. (Eds), *Public Relations as Relationship Management: A Relational Approach to Public Relations*, Lawrence Erlbaum Associates, Mahwah, NJ, pp. 3-22.

- Bucks Consultants (2009). IABC Research Foundation and Buck Consultants Employee Engagement Survey. Retrieved from:
<http://www.iabc.com/researchfoundation/pdf/EmployeeEngagement.pdf>
- Buffardi, L.E. & Campbell, W. K. (2008). Narcissism and social networking web sites. *Personality and Social Psychology Bulletin*, 34 (10). 1303-1314
- Bulmer, D. & DiMauro, V. (2009). Executive summary from the Society for New Communications Research Study: The new symbiosis of professional networks: Social media's impact on business and decision-making. *Journal of New Communication Research*, 4 (2), 93-99.
- Campion, M.A., Medsker, G.J., & Higgs, A.C. (1993). Relations between work group characteristics and effectiveness: Implications for designing effective work groups. *Personnel Psychology* 46 (4), 823-847.
- Center, A. H., & Jackson, P. (1995). *Public relations practice: Management case studies and problems* (5th ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Child, J.T & Shumate, M. (2007). The impact of communal knowledge repositories and people based knowledge management on perceptions of team effectiveness. *Management Communication Quarterly*, 21 (1), 29-54.
- Cho, S. & Huh, J. Jisu Huh, (2010). Content analysis of corporate blogs as a relationship management tool. *Corporate Communications: An International Journal*, 15 (1), 30 – 48
- Chon, B.S. Choi, J. H., Barnett, G. A., Danowski, J.A. & Joo, S.H. (2003). A structural analysis of media convergence: Cross-industry mergers and acquisitions in the information industries. *Journal of Media Economics*, 16 (3), 141-157.
- Conner, C. (2012, November 15). Employees really do waste time at work, Part II. *Forbes.com*. Retrieved from:
<http://www.forbes.com/sites/cherylsnappconner/2012/11/15/employees-really-do-waste-time-at-work-part-ii/>
- Contractor, N.S. & Eisenberg, E. M. (1990). Communication networks and new media in organizations. In J. Fulk & C.W. Steinfeld (Eds.), *Organizations and Communication Technology* (pp. 173-193). Newbury Park, CA: Sage Publications.

- Corman, S.R. & Poole, M.S. (2000). Introduction. In S.R. Corman & M.S. Poole (Eds.), *Perspectives on Organizational Communication: Finding Common Ground*. (pp.1-14). New York: Guilford.
- Cortese, A. (1996). Here comes the intranet. Business Week. Retrieved from: <http://www.businessweek.com/1996/09/b34641.htm>
- Cozier, Z.R. & Witmer, D. F. (2001). The development of a structuration analysis of new publics in an electronic environment. In R. L. Heath & G. Vasquez (Eds), *Handbook of Public Relations* (pp. 615-624). Thousand Oaks, CA: Sage Publications.
- Cozijn, R., Maes, A. Schackman, D. & Ummelen, N. (2007). Structuring job related information on the intranet: An experimental comparison of task vs. an organization-based approach. *Journal of Technical Writing and Communication*, 37 (2), 203-216.
- Cutlip, S.N., Center, A.H., & Broom, G.M. (1985). *Effective public relations (6th edition)*. Eaglewood Cliffs, NJ: Prentice-Hall.
- Davis, A. (2009). They're Just Not That Into You: Can Social Media Revitalize Employee Communication? *The Public Relations Strategist*. Spring, 20-22. Retrieved from: http://www.davisandco.com/aboutus/pressroom/downloads/ThePRStrategist_Spring2009.pdf
- Davis, F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13 (3), 319-340.
- De Bussy, N. M., Ewing, M.T. & Pitt, L. F. (2003). Stakeholder theory and internal marketing communications: A framework for analysing the influence of new media. *Journal of Marketing Communications*, 9 (3), 147-161.
- DeSanctis, G. & Poole, M.S. (1994). Capturing the complexity in advanced technology use: Adaptive Structuration Theory. *Organization Science*, 5, (2) 121-147
- Deuze, M. (2007). *Media work*. Malden, MA: Polity Press
- Dey, I. (1999). *Grounding grounded theory—Guidelines for qualitative inquiry*. San Diego, CA: Academic Press.

- DiMicco, J., Millen, D.R., Geyer, W., Dugan, C., Brownholtz, B. & Muller, M. Motivations for social networking at work. *Proceedings of the ACM 2008 conference on computer supported cooperative work*. San Diego, CA, 711-720.
- Durham, F. (2005). Public relations as structuration. *Journal of Public Relations Research*, 17, 29-48
- Edenius, M. & Borgerson, J. (2003). To manage knowledge by intranet. *Journal of Knowledge Management*, 7 (5), 124-136.
- Eisenhardt, K. M. (1989). Building theories from case study research. *The Academy of Management Review*, 14 (4), 532-550.
- Erdal, I. J. (2011). Coming to terms with convergence journalism: Cross-media as a theoretical and analytical concept. *Convergence*, 17 (2) 213-223.
- Emarketer.com (2012, March 23). Media multitasking brings challenges and opportunities for marketers. Retrieved from:
<http://www.emarketer.com/Article/Media-Multitasking-Brings-Challenges-Opportunities-Marketers/1008924>
- Falkheimer, J. (2007). Anthony Giddens and public relations: A third way perspective. *Public Relations Review*, 33, 287-293.
- Ferguson, M. A. (1984, August). *Building theory in public relations: Inter-organizational relationships*. Paper presented to the Public Relations Division, Association for Education in Journalism and Mass Communication, Gainesville, FL.
- Foley, M. J. (2011, March 24). Microsoft: We're adding 20,000 new SharePoint users a day. ZDNet. Retrieved from:
<http://www.zdnet.com/blog/microsoft/microsoft-were-adding-20000-new-sharepoint-users-a-day/9011>
- Friedl, J. & Vercic, A.T. (2011). Media preferences of digital natives' internal communication: A pilot study. *Public Relations Review*, 37, 84-86.
- Fulk, J. (1993). Social construction of communication technology. *Academy of Management Journal*, 36 (5), 921-950.

- Gephart, R. P. (2004). Sensemaking and new media at work. *The American Behavioral Scientist*, 48 (4), 479-495.
- Giddens, A. (1979). *Central problems in social theory: Action, structure, and contradiction in social analysis*. Berkeley, CA.: University of California Press.
- Giddens, A. 1984. *The Constitution of Society*. Berkeley, CA.: University of California Press.
- Greenhow, C. & Robelia, B. (2009). Old communication, new literacies: Social network sites as social learning resources. *Journal of Computer-Mediated Communication*, 14 (4), 1130–1161.
- Grunig, J. (1992). Symmetrical systems of internal communication. In J. Grunig (Ed.), *Excellence in public relations and communication management* (pp. 531-576). Hillsdale, NJ: Lawrence Erlbaum.
- Grunig, J., & Grunig, L. (1992). Models of public relations and communication. In J. Grunig (Ed.), *Excellence in public relations and communication management* (pp. 285-326). Hillsdale, NJ: Lawrence Erlbaum.
- Holmes, R. (2012a, August 30). The \$1.3 trillion price of not tweeting at work. *FastCompany.com*. Retrieved from: <http://www.fastcompany.com/3000908/13-trillion-price-not-tweeting-work>.
- Holmes, R. (2012b, October 16). Email is the new Pony Express-- and it's time to put it down. *FastCompany.com*. Retrieved from: <http://www.fastcompany.com/3002170/email-new-pony-express-and-its-time-put-it-down>
- Hon, L. C., & Grunig, J. E. (1999). *Guidelines for measuring relationships in public relations*. Gainesville, FL: *The Institute for Public Relations*. Retrieved from http://www.instituteforpr.com/pdf/1999_guide_measure_relationships.pdf
- Hovey, W.L. (2010). Examining the role of social media in organization-volunteer Relationships. *Public Relations Journal*, 4 (2), 1-23.
- Hung, C.J. F. (2005). Exploring types of organization-public relationships and their implications. *Journal of Public Relations Research*, 17 (4), 393-425.

- Ingram, D. (n.d.). The relationship between systems theory & employee relations. *Small Business Index*. Retrieved from:
<http://smallbusiness.chron.com/relationship-between-systems-theory-employee-relations-22465.html>
- Jack, L. & Kholeif, A. (2007). Introducing strong structuration theory for informing qualitative case studies in organization, management and accounting research. *Qualitative Research in Organizations and Management: An International Journal*, 2 (3), 208-225.
- Jenkins, H. (2006). *Convergence culture-Where old and new media collide*. New York: New York University Press.
- Jo, S. & Kim, Y. (2003). The effect of web characteristics on relationship building. *Journal of Public Relations Research*, 15(3), 199–223.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14-26.
- Johnson, R.B., Onwuegbuzie, A.J. & Turner, L.A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research*, 1 (2) 112-133.
- Jones, M. (1999). Structuration theory. In W. Currie & B. Galliers (Eds.) *Rethinking Management Information Systems* (pp.103-135). New York: Oxford University Press.
- Kaplan, A.M. & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53, 59-68.
- Kelleher, B. (2011, April 21). Ask the HR Expert: Employee Engagement and Performance Issues. *Nehra blog*. Retrieved from:
http://www.boston.com/jobs/employers/hr/nehra/2011/04/ask_the_hr_expert_employee_eng_4.html
- Kelleher, T., & Miller, B. M. (2006). Organizational blogs and the human voice: Relational strategies and relational outcomes. *Journal of Computer-Mediated Communication*, 11(2), <http://jcmc.indiana.edu/vol11/issue2/kelleher.html>
- Kelleher, T. (2008). Organizational contingencies, organizational blogs and public relations practitioner stance toward publics. *Public Relations Review*, 34, 300–302.

- Kelleher, T. (2009). Conversational voice, communicated commitment, and public relations outcomes in interactive online communication. *Journal of Communication*, 59, 172-188.
- Kent, M.L. & Taylor, M. (1998). Building dialogic relationships through the World Wide Web. *Public Relations Review*, 24 (3), 321-344.
- Kent, M. L., Taylor, M. & White, W.J. (2003). The relationship between Web site design and organizational responsiveness to stakeholders. *Public Relations Review*, 29, 63-77.
- Ki, E. J. & Hon, L. C. (2007). Testing the linkages among the Organization–Public relationship and attitude and behavioral intentions. *Journal of Public Relations Research*, 19 (1), 1-23.
- Kim, H.S. (2007). A multilevel study of antecedents and a mediator of employee organization relationships. *Journal of Public Relations Research*, 19 (2), 167-197.
- Kiousis, S. (2002). Interactivity: A concept explication. *New Media & Society*, 4 (3), 355–383.
- Kozlowski, S. W. J., & Bell, B. S. (2003). Work groups and teams in organizations. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), *Handbook of Psychology (Vol. 12): Industrial and Organizational Psychology* (pp. 333-375). New York: Wiley.
- Ledingham, J.A. (2003). Explicating relationship management as a general theory of public relations. *Journal of Public Relations Research*, 15 (2), 181-198.
- Ledingham, J. A., & Bruning, S. D. (1998). Relationship management and public relations: Dimensions of an organization–public relationship. *Public Relations Review*, 24, 55–65.
- Ledingham, J. A., & Bruning, S. D. (2000a). A longitudinal study of organization-public relationship dimensions: Defining the role of communication in the practice of relationship management. In J.A. Ledingham & S.D. Brunig (Eds), *Public Relations as Relationship Management: A Relational Approach to the Study and Practice of Public Relations* (pp. 55-70). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
- Levenshus, A. (2010). Online relationship management in a presidential campaign: A case study of the Obama campaign's Management of its Internet-integrated grassroots effort. *Journal of Public Relations Research*, 22 (3), 313-335.

- Locke, K. (2001), *Grounded theory in management research*. London: Sage Publications.
- Masrek, M.N., Karim, N.S.A., & Hussein, R. (2007). Investigating corporate intranet effectiveness: a conceptual framework. *Information Management & Computer Security*, 15 (3) 168-183.
- Masrek, M.N. & Jusoff, K. (2009). The effect of information technology infrastructure flexibility on intranet effectiveness. *Computer and Information Science*, 2 (2), 57-69.
- Microsoft (n.d.). SharePoint 2013 overview. Retrieved from:
<http://office.microsoft.com/en-us/sharepoint/what-is-sharepoint-sharepoint-features-FX103789323.aspx>
- Miller, W.L. & Crabtree, B.F. (1999). Clinical research-A multimethod typology and qualitative roadmap. In B.F. Crabtree & W.L. Miller (Eds.) *Doing Qualitative Research (2nd edition)*. (3-30). Thousand Oaks, CA: Sage Publications.
- Murgolo-Poore, M.E., Pitt, L.F., & Ewing, M. T. (2002). Intranet effectiveness: A public relations paper-and-pencil checklist. *Public Relations Review*, 28, 113-123.
- Murgolo-Poore, M.E., Pitt, L.F., Berthon, P.R. & Prendegast, G. Corporate intelligence dissemination as a consequence of intranet effectiveness: an empirical study. *Public Relations Review*, 29, 171-184.
- Ni, L. (2007). Redefined understanding of perspectives on employee-organization relationships. *Journal of Communication Management*, 11, 53-70.
- O'Reilly, T. (2005, September 30). What is Web 2.0- Design patterns and business models for the next generation of software. Retrieved from:
<http://oreilly.com/pub/a/web2/archive/what-is-web-20.html?page=1>
- Orlikowski, W.J. (1992). The duality of technology: Rethinking the concept of technology in organizations. *Organization Science*, 3 (3), 398-427.
- Orlikowski, W.J. (2000). Using technology and constituting structures: A practice lens for studying technology in organizations. *Organization Science*, 11 (4) 404-428.

- Orlikowski, W.J. & Scott, S.V. (2008). The entangling of technology and work in organizations (Department of Management Information Systems and Innovation Group London School of Economics and Political Science, Working Paper Series 168). Retrieved from: <http://eprints.lse.ac.uk/33898/1/wp168.pdf>
- Orlikowski, W.J., Yates, J.A., Okamura, K., & Fujimoto, M. (1995). Sharing electronic communication: The metastructuring of technology in the context of use. *Organization Science*, 6 (4), 423- 444.
- Perlow, L.A., Gittell, J. H. & Katz, N. (2004). Contextualizing patterns of work group interaction: Toward a nested theory of structuration. *Organization Science*, 15, 520-536.
- Pilgrim, G. (2012, March 19). Intranet Vs. Internet. Buzzle.com. Retrieved from: <http://www.buzzle.com/articles/intranet-vs-internet.html>
- Poole, M. S. (2003). Group communication and the structuring process. In R. Y.Hirokawa, R. S. Cathcart, L. A. Samovar, & L. D. Henman (Eds.), *Small group communication theory & practice: An anthology* (8th ed., pp. 48-56). New York: Oxford University Press.
- Poole, M.S. & DeSanctis, G. (1990). Understanding the use of group decision support systems: The theory of adoptive structuration. In J. Fulk & C.W. Steinfeld (Eds.) *Organizations and communication technology* (pp. 173-193). Newbury Park, CA: Sage.
- Poole, M.S. & DeSanctis, G. (1992). Microlevel structuration in computer-supported group decision making. *Human Communication Research* 19 (1), 5-49.
- Pozzebon, M. & Pinsonneault, A. (2000). The structuration theory in IT: Usage patterns and methodological issues. *Academy of Management Conference —AOM 2000*. Toronto, Canada, August 7–9.
- Pozzebon, M. & Pinsonneault, A. (2005). Challenges in conducting empirical work using structuration theory: Learning from IT research. *Organization Studies*, 26(9) 1353–1376.
- Rafaeli, S. & Sudweeks, F. (1997). Networked interactivity. *Journal of Computer Mediated Communication*, 2 (4). Retrieved from: <http://jcmc.indiana.edu/vol2/issue4/rafaeli.sudweeks.html>
- Richtel, M. (2010, August 24). Digital devices deprive your brain of needed downtime. *New York Times*, p. B1.

- Ross, G. (2009, October 22). The problem of the intranet. *The Social Intranet Blog*. Retrieved from: <http://www.thoughtfarmer.com/blog/2009/10/22/the-problem-of-the-intranet>
- Rubin, H.J., Rubin, I. (2005). *Qualitative interviewing: The art of hearing Data*. Thousand Oaks, CA: Sage Publications.
- Schmitz, J. & Fulk, J. (1991). Organizational colleagues, media richness and electronic mail: A test of the social influence model of technology use. *Communication Research*, 18 (4), 487-523.
- Shaw, G. (2009, June 10). Social Media and Employee Communications: An Opportunity to Experiment. *HealthLeaders Media Marketing blog*. Retrieved from: <http://www.healthleadersmedia.com/content/MAR-234312/Social-Media-and-EmployeeCommunications-An-Opportunity-to-Experiment>
- Shewchuk, R. (2010, March 18). Social media have a role in the workplace. *Vancouver Sun*. Retrieved from: http://ronshewchuk.blogs.com/for_your_approval/the_future_of_employee_communications
- Sinclair, J.K. & Vogus, C.E. (2011). Adoption of social networking sites: An exploratory adaptive structuration perspective for global organizations. *Information Technology and Management*, 12, 293-314.
- Sinickas, A.D. (2005). The role of intranets and other E-channels in employee communication preferences. *Journal of Website Promotion*, 1 (1), 31-51.
- Stake, R. E. (1994). Case Studies. In N.K. Denzin & Y.S. Lincoln (Eds). *The SAGE Handbook of Qualitative Research* (pp. 236-247). Sage Publications: Thousand Oaks, Ca.
- Stafford, L., & Canary, D. J. (1991). Maintenance strategies and romantic relationship type, gender, and relational characteristics. *Journal of Social and Personal Relationships*, 8, 217-242.
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications.
- Sundar, S. S., Kalyanaraman, S., & Brown, J. (2003). Explicating Web site interactivity: Impression formation effects in political campaign sites. *Communication Research*, 30, 30-59.

- Sundar, S. S. (2008). The MAIN model: A heuristic approach to understanding technology effects on credibility. In M. J. Metzger & A. J. Flanagin (Eds.), *Digital media, youth, and credibility* (pp. 72-100). Cambridge, MA: The MIT Press.
- Sweetser, K.D. (2010). A losing strategy: The impact of nondisclosure in social media on relationships. *Journal of Public Relations Research*, 22(3), 288–312.
- Sweetser, K. D., & Metzgar, E. (2007). Communicating during crisis: Use of blogs as a relationship management tool. *Public Relations Review*, 33, 340–342.
- Treem, J. W. & Leonardi, P.M.. (2012). Social media use in organizations: Exploring the affordances of visibility, editability, persistence, and association, *Communication Yearbook*, 36, 143-189.
- Vallaster, C. & de Chernatony, L. (2006). Internal brand building and structuration: the role of leadership. *European Journal of Marketing*, 40 (7/8), 761-784.
- Walden, J. (2011). *A case for survey based case studies: Considerations of generalizability and theory*. Paper presented at the Association for Education in Journalism and Mass Communication annual conference, St. Louis, MO.
- Walden, J. (2013). A medical profession in transition: Exploring naturopathic physician blogging behaviors. *Health Communication*, 28 (3), 237-247.
- Waters, R. D., & Bortree, D. S. (2007). Measuring the volunteer-non-profit organization relationship: An application of public relations theory. *International Journal of Volunteer Administration*, 24(6), 57-67.
- Wattal, S., Racherla, P., & Mandviwalla, M. (2009). Employee adoption of corporate blogs. *Proceedings of the 42nd Hawaii International Conference on System Sciences*.
- Webster, J. G. (2011). The duality of media: A structurational theory of public attention. *Communication Theory*, 21, 43-66.
- Weick, K.E. (1985). Cosmos vs. Chaos: Sense and Nonsense In Electronic Contexts. *Organizational Dynamics*, 14 (2), 51-64.
- Weick, K. E. (1995). *Sensemaking in Organizations*. Thousand Oaks, CA: Sage Publications.

- Welch, M. & Jackson, P.R. (2007). Rethinking internal communication: a stakeholder approach. *Corporate Communications: An International Journal* 12 (2) 177-198.
- Wilson, L. J. (2000). Building employee and community relationships through volunteerism: A case study. In J. A. Ledingham & S. D. Bruning (Eds.), *Public relations as relationship management: A relational approach to public relations* (pp. 137–144). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Wilson, T. (2011a). The Social Intranet Study 2011. Retrieved from:
<http://www.prescientdigital.com/downloads/social-intranet-study-2011-summary-report>
- Wilson, T. (2011b). Intranet 2.0: Social media adoption. *Prescient Digital Media Articles*. Retrieved from:
<http://www.prescientdigital.com/articles/intranet-articles/intranet-2-0-social-media-adoption/>
- Witmer, D. F. (2000). *Spinning the Web: A Handbook for Public Relations on the Internet*. New York: Addison Wesley Longman.
- Witmer, D. F. (2006). Overcoming System and Culture Boundaries: Public Relations from a Structuration Perspective. In C. Botan & V. Hazleton (Eds.). *Public Relations Theory II*. (pp. 361-374). Mahwah, NJ, Lawrence Erlbaum.
- Yates, J. & Orlikowski, W. J. (1992). Genres of organizational communication: A structurational approach to studying communication and media. *The Academy of Management Review*, 17, 299-326.
- Yin, R. (2009). *Case Study Research- Design and Methods (Fourth Edition)*. Thousand Oaks, CA.: Sage Publications.

VITA

Justin Andrew Walden

Education:

PhD in Mass Communications, Pennsylvania State University (2009-2013)

MA in Media Studies, Syracuse University (2003-2006)

BA in Political Science, University of Albany (1997-2001)

Academic Appointments:

Assistant professor, public relations, SUNY College at Brockport (Fall 2013-)

Teaching assistant, telecommunications, Pennsylvania State University (2009-2013)

Teaching assistant, journalism, Syracuse University (Spring 2005)

Research Publications:

Walden, J. (2013). A medical profession in transition: Exploring naturopathic physician blogging behaviors. *Health Communication*, 28 (3), 237-247.

Dou, X., Walden, J., Lee, S., & Lee, J.Y. (2012). Does source matter? Examining source effects in online product reviews. *Computers in Human Behavior*, 28 (5), 1555-1563.

Walden, J. (2012). Comparing power amid change: Medical authority on physician blogs. *Pennsylvania Communication Association Annual*.

Prior Professional Experience:

Newspaper reporter, newspaper editorial assistant, public relations specialist/ coordinator