

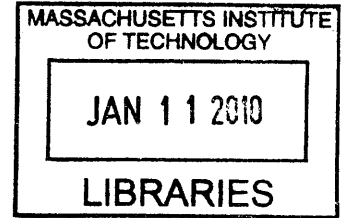
Understanding the BlackBerry: Negotiating connectivity in different organizational worlds

by

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Submitted to the MIT Sloan School of Management in partial fulfillment of the requirements for
the degree of

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Abstract

This research challenges the popular conception that BlackBerry use is solely an individual phenomenon. Email is social. People use and experience the potential for wireless email in terms of their occupational identity, daily work practices and organizational context. I collected longitudinal qualitative data from the in-house legal counsel and U.S. mobile sales in a mid-sized footwear and apparel company to understand the process through which people experience wireless email over time. I examined how each group engaged with the BlackBerry from its introduction to over three years of use. My inductive study reveals how initial technological frames inform, but do not determine, emerging patterns of BlackBerry use and how such frames can shift dramatically over time. Further, I trace how individual experience evolves into shared norms that carry significant personal consequences for group members. I unpack how BlackBerry users in the legal team shaped the potential for constant access into a form of social constraint, while BlackBerry users the sales force embraced expanded access to email as enabling increased autonomy and personal time. This work contributes to current research on communication in the digital age by highlighting key dimensions such as anticipated expectations of clients, peers and superiors, as well as the alignment between occupational identity and constant availability, that influence how users take up the potential for ubiquitous email. This research suggests a number of implications for the evolution of work practices, temporal structures, and ramifications of constant connectivity in the modern workplace.

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My time at the Sloan School of MIT has been an extended attempt to shift from consuming knowledge toward learning to produce it. Although this can be a solitary struggle, I was blessed by colleagues and mentors who offered much needed insight, advice, and encouragement along the way.

As an early master’s student at the University of Michigan, School of Information, I attended a seminar given by Wanda Orlikowski. Her talk captured and crystallized my interests. I was in the midst of a (still ongoing) struggle to find the language to describe my perspective. I listened intently and scribbled incessantly as Wanda spoke with a fluent ease about the slippery relationship between individual agency, social structures, and technologies in use. I clearly remember being struck when she used the pronoun “we.” I tried to imagine these students; people lucky enough to work with Wanda and JoAnne Yates, and could only conjure a sense of disbelief. While no longer as incredulous that people get to do this kind of work, my awe and admiration have not waned. For the past six years Wanda and JoAnne tirelessly encouraged my attempts, wrestled with my language, line-edited my writing, questioned my assumptions, expanded my thinking, and invited me to become one of that “we.” I still pinch myself. As advisors they gave me time, confidence and freedom. From getting the scoop on different courses and opening the door to research opportunities, to wrestling through philosophy with Steve Kahl and providing financial support, you provided me the tools, friendship, and support to navigate this program and prepare for an academic career. I will continue to rely on you for years to come. And my thanks are manifold.

Visiting MIT as a prospective student Kate Kellogg took me for coffee. I was full of anticipation and remember asking her what I should do over the summer to prepare for the program. Kate’s initial answer was to relax and read novels because I was not going to have that opportunity for some time. But then she modified this advice saying, “If you’re going to read anything go get John Van Maanen’s *Tales of the Field*.” I read John’s book and was pleased to learn that

research was an effortless interplay between insightful theory, evocative details, narrative intrigue, and structural coherence. Oh John, could there have been a more deceiving book from which to start this endeavor? Your grace and humor belie the hard work and sharp analysis that undergird every word. Yet, my initial impression of John formed before ever meeting him proved, in many ways, to be spot on. You are the engaging scholar I envisioned. I could not yet imagine how much I would benefit from the sparkle in your eye, the deep laugh, and encouraging analysis. You have a way of making students feel interesting as people while helping us unpack what is interesting in our data. I hope to keep up our coffee dates from across the country and into my future.

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I was once introduced to incoming students as “the one who takes vacations,” so I feel compelled to acknowledge the places I visited as a doctoral student that were a refuge, an escape, and an old fashioned good time. So, thank you to the Coulter’s basement. Thank you to the Cabin, the Cape, Manitou Island, Long Island, White Mountains and Dartmouth cabins. Thank you to Spain, London, Hawaii, Boulder, and Big Sur. And, most important, thank you to all the friends and family who made such trips memorable. The little reprieves make the work tolerable and the journey worthwhile.

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For the makeshift family of 15 Waldo Ave. -- Bryon, Mary & Zabelle

Preface: The 'Crackberry'

What is a BlackBerry? For some it is liberation, for some constraint. It is described as a virtual window and an electronic leash. The 'BlackBerry' is both an evocative symbol and a daily experience. It is associated with connectivity, blurring, speed and freedom. Carrying a BlackBerry allows interaction to be ever-present and asynchronous; engaging in email relationships regardless of time or space. How this capacity affects communication patterns, organizational experience and daily life are questions for research. According to the zeitgeist, the effects are tremendous. The BlackBerry has become a 'media darling,'¹ generically representative of an era.

For Barack Obama the BlackBerry is a valued representation of his communication style and goals as President of the United States. It represents his desire to be 'in touch' and additionally, it is a symbol that he is young and technically adroit. President Obama hopes to distance himself from the shroud of isolation reputed to characterize past administrations. Asked in January 2009 the hardest thing about being president, he answered, "How do you stay in touch with the flow of everyday life?" And how does the President of the United States stay in the "flow"? According to Obama, he carries a BlackBerry. Questioned specifically about his relationship with the device, the President says

What it has to do with is having mechanisms where you are interacting with people who are outside of the White House in a meaningful way. And I've got to look for every opportunity to do that--ways that aren't scripted, ways that aren't controlled, ways where, you know, people aren't just complimenting you or standing up when you enter into a room, ways of staying grounded (Harwood January 7, 2009).

¹ In the course of this research I was interviewed eight times by television and print journalists representing various media outlets such as the Wall Street Journal, the London Independent, the Toronto Reader, FOX local news and WBZ TV.

President Obama and his BlackBerry have become a major news story (Clifford January 9, 2009; Zeleny January 8, 2009; Zeleny January 23, 2009; Zeleny November 16, 2008). Reporters enjoy quotes such as “I’m still clinging to my BlackBerry,” and “They’re going to pry it out of my hands.” (Zeleny January 23, 2009). This fascination with Obama and his BlackBerry extends beyond an arresting tag line. This relationship emerged from, and is steeped in, a particular culture at a particular time.

Western society is currently obsessed with the experience and hyperbole of ‘constant connectivity.’ The BlackBerry is a concrete representation of this potential that has taken hold in popular imagination. ‘CrackBerry,’ the moniker regularly attached to the device, was Webster’s Dictionary’s official word of the year in 2006. The term hints at a communication experience that is described as an addiction, a godsend, and a simultaneous source of stress and freedom. News stories trump up fears about the relationship between wireless email and addiction (Babin 2006; Locher 2007; McIntyre 2006; Montagne 2006; Pfeiffer 2005; Reuters 2006; Rosato 2003; Staff 2006). These stories capitalize on an understanding that we are living in an era of increasing connectivity. History trends in this direction. Throughout human history communication and information technologies have become increasingly portable and accessible. The explosion in electronic and networked technologies in the past thirty years takes the potential to reach people and share information across the globe to a new, almost inconceivable, level.

Scholars are trying to understand and make sense of how these technical advances enable and constrain new forms of organizing, working, being and communicating. Who are we when we carry in our pockets volumes of information and the capacity to reach each other instantly? How does this capacity affect our relationship to, and role within, our families, our organizations and our nation states? Attempts to understand these phenomena often take a broad theoretical perspective on how connectivity is changing the nature of society and human experience as a whole. At the other extreme, psychologists and scholars interested in human computer interaction often examine the relationship between individuals and technologies from micro perspectives.

New communication technologies enable and constrain certain modes of interaction, expanding or restricting possible conversations and re-defining patterns of interaction across space and time (Giddens 1984; Meyrowitz 1985). Each medium of communication is a new arena for interaction (Goffman 1959), potentially providing new links between people and transmitting the content of interaction in new ways. Tools do not determine use, but they may disrupt current patterns of relations. As such, they affect the evolution of individual 'selves' and the character of social worlds. If self, structure, and society are continuously re-created through interaction, then the nature, record, and vehicle of that interaction carry great power.

Obama's BlackBerry has been configured such that only a few trusted friends will be able to reach him. Therefore, it is dubious that it will enable him to satisfy his purported goal of getting outside the presidential bubble to "stay in touch with the flow of everyday life." Regardless, carrying the tool is symbolic. It represents the president he wants to be and the society we have become. Wireless email has become a de facto, and nonnegotiable requirement for numerous professionals who want to be taken seriously in the social world of commerce.

Aside from the President of the United States of America, BlackBerry users are people, in a wide array of working arrangements, who often stay connected to email in order to *do* their job and *be* their job. Glancing at a small screen of incoming messages, BlackBerry users carry a window into an ever-changing virtual world of email. They glance at this window constantly in order to assuage a fear of disconnection. Yet, regardless of individual motivation or potential for 'addiction,' BlackBerry use is not an individual act. Users are also managing and negotiating the expectations of the varied communication partners who pull the strings of their personal and professional lives. BlackBerry users are often passionate about their BlackBerrys. They describe how the tool affects their psychological state, physiological experience and social worlds. This dissertation presents grounded research and analysis that examines everyday life in the connected world at a level more concrete than generalized theories. And, it expands the individualistic cognitive perspectives on information access to acknowledge the inextricable relationship between individual experience and social webs.

Chapter 1: Introduction

Mary is a 38 year old corporate attorney with two young children. Like many of us she experiences a daily struggle around how to balance her priorities, her life, her work and her family. Mary left a job at a large law firm and jumped on the opportunity to move to a position as in-house counsel at an apparel and footwear firm. Linden Shoes was reputed to be “family friendly,” regularly made its way onto the lists of best employers for working parents, and seemed like a relaxed and sustainable place to work. Like her colleagues, Mary consciously made a “lifestyle” change in order to accommodate personal priorities and family pressure. Four years on the job she describes her working environment as collegial and often fun. Mary shares the experience of bringing up young children with several of her colleagues and is quick to assure me that while kids will “change your life” people often forget to mention how absolutely wonderful they are.²

Mary is devoted to her job. She enjoys not having to justify every second by billing blocks of time to outside clients. She appreciates building long-term relationships with clients and the sense that they enjoy the same goal of firm success. Mary keeps her door open at work and chooses to eat lunch in the dining hall to encourage people to come up, check in, and use her expertise. She is a lawyer in a manner that she is proud of and admits that her “career” has always been a priority in her family and in her marriage. However, Mary is struggling.

Although she emphasizes that she is constantly harried, behind, and overworked, Mary ends up taking two hours out of a busy day to talk about her BlackBerry. Mary is vociferous about the BlackBerry because the device has evolved into an integral, and complicated, part of her life. Mary was genuinely excited about getting a BlackBerry, and initially felt that it would help her be the kind of person she wanted to be. She hoped that having easy access to email would increase her flexibility and enable her to focus on her family while not losing her identity as a professional and

² I was visibly pregnant at the time of this interview.

dedicated attorney. After using a BlackBerry for approximately two years, Mary is angry and frustrated. Even though the device *does* help her be more attuned to her client's needs and engage in friendly conversation with work colleagues, it is also exerting a personal cost. She refers to tension in her marriage and ponders what kind of mother is never totally "there" during a family vacation. According to Mary,

I don't think that it was intended to be able to get people all the time. But that's what it's become... we're all just too Type A and we work too hard and every person in our department has a work ethic that just kind of obscures other things that could go on in your life... So it's like giving a person who has an eating issue a big chocolate cake.

Is Mary to blame for loving chocolate cake? Or, in this scenario, does chocolate cake become something more akin to bread and water – no longer a treat but a necessity. Mary is not alone. I witnessed a similar progression from excitement to disillusionment in many of her colleagues. The evolution from individual empowerment to "what it's become" in Mary's legal department is the story of this dissertation. But it is only half the story.

The other side of the story is represented by Doug. Doug has been a salesman all his working life. He has worked at Linden Shoes for 26 years. Doug is a talker and a joker. He describes himself as a "people person" and heralds his Bachelor's degree in psychology as enabling him to be a real salesman. Doug has grown children and a devoted wife. He knows he could bury himself in his work but, from his self-described "old school" perspective, asks why he would want to. Doug wants to play basketball in the evenings, relax with his wife at night and go fishing with his buddies on the weekend. He fears that new technologies might encroach on his lifestyle and steal his time. Prior to getting a BlackBerry Doug felt that technology was a "weapon" that could be used against him. He feared that connectivity to email would cause others to expect more, shift their demands, and destroy the work-life balance he worked hard to maintain. Doug wondered if he would be edged out as an "old timer" and feared that his skill at selling shoes would be diminished by an internal emphasis on keeping in touch. Doug is devoted to his job, his colleagues and his accounts. But he feels that those focused on new technologies don't understand his priorities and, more importantly, his skill set. According to Doug the technology upstarts aren't salesmen and, "Honestly, couldn't sell free lemonade in the Sahara Desert."

After using the BlackBerry for over three years Doug is in a different position from Mary. He is still Doug, still humorous and prone to hyperbole. And he still asserts that,

I really get annoyed with these people who spend their days on the phone or on these BlackBerrys. They are caught up with these little machines. What I'm really saying is that Santa Claus has it right; gifts should come once a year. I don't need to talk to someone four or five times a day. Some people go on and on with inane dribble back and forth on the BlackBerry. What a waste of time. I mean how many serious conversations do you have to have with someone in one day?

Doug continues to focus on the importance of limited but genuine human connection. Like Mary he wonders about the effect on personal relationships when email intersperses everyday experience in little chunks. But when asked about his own experience with the BlackBerry Doug is overwhelmingly positive about the effects of having email in his pocket. After three years of use Doug reflects,

Back in '05 I was concerned about the BlackBerry. But, it's been good. It's more positive than negative. It didn't change my autonomy and freedom. I suppose there's that potential, but it just didn't happen with me. It's a good tool. I certainly think it's a good tool. If I said less than that back in '05, well, I'm not the first guy to not embrace change.

Not the first guy to resist change, no. But in a world of networked connectivity, Doug seems increasingly unusual in his experience that BlackBerry communication did not affect his individual autonomy and freedom. Where is Doug's chocolate cake? Where are his connected colleagues? How did Doug manage, after three years with a BlackBerry on his belt, to remain in control of a tool that many find to be the epitome of 'addictive' technologies? Over time Doug felt that carrying a BlackBerry aided his ability to be a salesman in manner consistent with personal goals to maintain work/life boundaries. And Doug does not believe he is an outlier. In his words, "I don't know too many guys who are on the BlackBerry at home. What would be the point of having a BlackBerry at home?" This assertion proved to be a common experience of the device in Linden sales. Doug's colleagues in sales similarly found themselves able to use the BlackBerry in a way that works for them while maintaining, and often increasing, personal time.

Unlike the attorneys in the same company, who have learned to embed their BlackBerrys in the deepest corners of their private lives, Doug simply doesn't see the point. This blasé comment hints at the chasm of experience between Linden attorneys and Linden sales people. Doug doesn't know

about Mary's experience. They live in distinct organizational worlds. Understanding the difference between Mary and Doug involves an analysis that is grounded in everyday experience and honors the complex interplay between individual desires and social environments. This dissertation tells their story. It follows two functional groups within the same organization as their members are introduced to the BlackBerry, make sense of the device, and use it in their daily communication practices over a period of three years. Two overarching research questions oriented this study. First, how is the potential for expanded access to wireless email enacted within different social contexts? Second, what are the conditions under which people experience different consequences from the use of wireless email. Tracing how the legal team and mobile sales force at Linden experience their BlackBerrys is a window into the social process of engaging with communication technologies.

Outline of the Dissertation

Chapter 2 of the dissertation presents an overview of the research that informs this study. First, I frame my work in terms of the sociological and psychological research about information technology and constant connectivity. These diverse perspectives inspired me take a critical stance toward my data and place my work in the context of scholars who address life in the 'information age.' The bulk of Chapter 2 is a review of the specific theoretical perspectives that orient my thinking and guide my data analysis. In particular, social identity theory, practice perspectives and constructivist views of technology-in-use inform my understanding of the social dynamics I witnessed at Linden. These theories shed light on the process of interpretation, use, and experience of BlackBerrys over time. In addressing the longitudinal nature of my data, I find sociological perspectives on the relationship between individual action and social structuring to be invaluable.

Chapter 3 outlines my experience collecting and analyzing qualitative data. I describe my field site, Linden Shoes,³ and the research methods I used. I provide context on my experience in the field as well as background on the internal functions -- in-house counsel and the U.S. sales team -- that are the focus of this dissertation. I also provide a description of how I analyze my data and move from ethnographic observation to generalizable insights.

In Chapter 4 I focus on the in-house counsel, and tell a story of the evolving relationship between Linden attorneys and BlackBerrys over time. I review how Linden attorneys initially make sense of the potential for BlackBerry communication and how their early sense of the tool aligned with their professional sense of self. I trace the evolution of BlackBerry use, from the choice of individuals to embed BlackBerry communication into the micro moments of daily life, to the emerging norms and structures that serve to limit and frame individual choice. Chapter 4 ends with an overview of how attorneys feel about their BlackBerrys after three years of use and the conundrum that they find themselves in: caught between the rhetoric of autonomy and prestige and a sense of being trapped by the expectation of constant connectivity.

In Chapter 5 I focus on the U.S. mobile sales force, examining the process of BlackBerry adoption and use over time in this group. Like the attorneys, the salespeople approached the device in terms of their professional identity and daily communication needs. Similarly, these initial conceptions oriented how individuals used the device and set the stage for emerging norms and expectations. In contrast to the attorneys, the salespeople were initially ambivalent about the device. In further contrast, their orientations evolved into a shared appreciation of the capacity for wireless email. Chapter 5 concludes with a description of how the sales team managed, after three years, to use the BlackBerry to increase efficiency during working hours while protecting and increasing personal time.

³ As with all proper names 'Linden' is a pseudonym for the purpose of this study.

In Chapter 6 I focus explicitly on comparing the experiences of the Linden legal team and sales team. I discuss key phases in the process of introduction, adoption and evolution of a new communication medium in light of a specific social and functional context. I highlight, for each phase, the set of circumstances specific to the attorneys and the salespeople and theorize about the relationship between work structure, professional identity, and communication technologies within these different functions. Through this analytic comparison I highlight the key elements that inform whether people in a tight, work-based, communication network are able to manage the possibility of constant ‘unobtrusive’ connection in a manner does not undermine, and may enhance, work/life balance.

Finally, in Chapter 7, I integrate and apply the insights derived from my data and analytical comparison. I discuss how the perspectives garnered from this research inform a deeper understanding of the social implications of communication technologies. I assert that communication partners can pay heed to their implicit practices that instantiate social structures and attempt to move away from unsustainable networks of relations. I conclude with implications of my perspective for the interplay between social identity and daily practice for theories of technology in use and technological frames of reference.

In sum, this dissertation traces how individuals make sense of and use a new communication technology. Understanding this process reveals how, over time, users can dramatically shift their frames of reference toward a communication technology. These data reveal how the relationship between individual users, communication partners, and the technologies they use to engage with each other can evolve in unexpected and counterintuitive ways. People who assumed that they would love carrying a BlackBerry find the experience frustrating and demoralizing. People who feared the effects of constant connection and resisted the BlackBerry find themselves loving the device. How and why these orientations shift reflect the intricate connection between individuals, their tools, their desires, and their social worlds.

Chapter 2: Theory

Locating the research

BlackBerrys are one of a number of mobile and networked devices that scholars argue are redefining social dynamics by enabling new forms of interaction and collaboration (Chayko 2008; Lyytinen and Yoo 2002; Pica and Kakihara 2003; Srivastava 2008). Such tools are emblematic of the move toward “ubiquitous computing” (Weiser 1991) purported to produce an environment characterized by mobile working, networked information flows and continual communication. Yet, while such technologies are expected to challenge taken-for-granted expectations of connectivity, responsiveness, and coordination, little research has been done to explore how such devices are actually experienced in day-to-day life. Of the work that does examine the use of communication technologies in daily life, most focuses on populations outside of the professional workforce. In fact, the most recent and comprehensive book on the state of research on mobile communications explicitly excludes “dissecting mobile communication uses in business, commercial, or professional settings... [in order to] understand the cultural, familial, and interpersonal consequences of mobile communication in a global context” (Katz 2008 pp. 12)

While such research is valuable, it ignores the vast number of cell phones and wireless email devices provided to employees by their employers. The social networks, power dynamics and ongoing negotiations between communication practices and professional identity inherent in work-based communication are thus unexamined. Work is a central guiding force in daily life. Work is financial resources. Work is friendships, security, and collegiality. Work is also politics, bureaucracy, feuding and power. Principally, work is time. Time spent in the office and, more and more, time spent beyond a physical locality or temporal space defined for ‘work.’ Time spent thinking about work and time spent communicating about work are all elements of the temporal commitment that every individual gives to his or her job.

Concomitant with new technologies in the workplace are questions about what the tools mean for individuals, for work, and for social hierarchy. There is an inherent tension between technologies that promise efficiency gains and the people who use them. Who reaps the benefit of efficiency gains? How will jobs be affected as individuals modify work practices in accordance with new tools? Examining the use of mobile communication technologies absent a deep look at the relationships between work, technology and communication minimizes the complex social webs that tie people together. People are indebted to colleagues in a manner distinct from friends and family. Communication is time and new technologies mediate our sense of temporal patterns. As such, they inform our shared expectations of when and where work-related communication happens. Therefore, tools provided by organizations that enable new communication acts are not neutral. Communication technologies are experienced as symbolic markers. Further, work-related communication is inherently twofold: a transfer of information and a complex negotiation regarding what is required to play the role of a committed employee.

Before outlining the theoretical perspectives on identity, technologies-in-use and practices of social structuring that inform my research, I locate my work in terms of the ecology of literature on social and individual experiences of life in the 'information age.' As a grounded look at the individual and social process of technological adoption, this research falls in the category of sociological 'miniaturism' (Stolte, Fine, and Cook 2001) or theories of the middle ground (Merton 1968).

Macro theories of connected society

A prominent social theorist of the late twentieth century, Anthony Giddens, discusses 'modernity' as a networked world characterized by 'space-time distanciation' or the stretching of temporal and physical locality of interaction (Giddens 1984). According to Giddens, this stretching is problematic because individuals have traditionally infused interactions with meanings derived from their unique position in space (contextual aspects of the local) and in time (repetitive routines of interaction). Giddens is concerned that when this fixity is called into

question, individuals cannot call upon shared temporal and physical anchors in the construction of meaning and shared expectations. Because “[T]ime-space ‘fixity’ also normally means social fixity; the substantially ‘given’ character of the physical *milieux* of day-to-day life interlaces with routine and is deeply influenced in the contours of institutional reproduction” (Giddens 1984, p. xxvi). Giddens wonders how individuals will accomplish the continuous self-project of constructing meaning when the taken-for-granted in social interaction is modified. He warns: “One of the main features of modern technologies of communication is that they no longer allow distance in space to govern temporal distance in mediated interaction . . . [consequently] transmutations might be occurring in structures of signification in the contemporary world” (Giddens 1993, p. 179).

In strikingly similar language, Mark Poster discusses communication technologies as compressing time and space. Poster believes that “the extent to which communication is restricted by time and space governs, with striking force, the shape society may take” (Poster 1990, p. 8). Poster asserts that in a world where technical restrictions on the speed, size, form, and content of information transfer are minimal, information begins to take on the properties of an entity separate from the individuals interacting. Poster describes a double movement of society or “mode of information” where individuals and institutions operate on one level, and information flows exist on another. In this world of constant flow between displaced people, the individual as a subject loses perspective on the object of communication. He or she becomes a multiplied and dispersed receiver of messages. In his words, “In the mode of information it becomes increasingly difficult, or even pointless, for the subject to distinguish a ‘real’ existing ‘behind’ the flow of signifiers, and as a consequence social life in part becomes a practice of positioning subjects to receive and interpret messages” (Poster 1990, p. 15).

Poster also calls for an awareness of the type of person encouraged or rewarded by the current configuration of social and technical structures. Contending that “a critical understanding of the new communications systems requires an evaluation of the type of subject it encourages” (Poster 1995, p. 23), Nicola Green echoes this warning in her assertion that mobile phones encourage a turn toward inward surveillance. Expectations of constant

connectivity may “normalize the notion that individuals *should* be available and accountable to others, visibly and transparently, at any time and place” [emphasis in original] (Green 2001, p. 33). Similarly, Sherry Turkle questions how tethering technologies inspire new tethered selves that fold into each other in an “always-on/always-on-you subjectivity.” Turkle ponders what will emerge when teenagers develop their identity in a world that is always available, always on, and always there to validate one’s emerging self (Turkle 2008). When the challenging task of self reflection is easily replaced by the omniscient accessibility of friends and distractions, will children learn to become empathetic and self-sufficient participants in social life?

Manuel Castells goes beyond the individual, the subject and communication acts, taking a similar line of theorizing to a broader level of analysis. Castells develops an extensive theory about a global capitalistic economy based on ‘timeless time’ and the ‘space of flows.’ He conceives of ‘space’ as divorced from a particular locality, taking its form in the conglomeration of practices that are simultaneous in time. As simultaneity and locality become decoupled through networked technologies, space becomes an abstract arena of ‘flow.’ While physically dislocated, “space brings together those practices that are simultaneous in time. It is the material articulation of this simultaneity that gives sense to space vis-a-vis society” (Castells 1996, p. 11).

Castells’ model redefines the notions of ‘time’ and ‘space’ in order to create the image of an almost physical entity; a mass of information incessantly flowing across a network of diverse information technologies. In his words, “Capital's freedom from time and culture's escape from the clock are decisively facilitated by new information technologies, and embedded in the structure of the network society” (Castells 1996, p. 433). While we do not live in this ‘space’ Castells argues that the function and power of global economy and society is organized through the logic of its flow. Further, if space is the dislocated flow of information, ‘time’ according to Castells, is the logic of the network that materializes ‘space.’ Because the network allows for simultaneity in interaction without reference to distance, it subverts the rhythms of socially constructed and biologically based time and operates under a logic of compressed ‘timeless

time.’ Whether or not this is mirrored in everyday experiences of connectivity in the modern world is an open question.

Like Castells, Robert Hassan calls for a redefinition of ‘time’ diverging from a linear conception of ‘clock time’ to an updated temporal concept of ‘network time.’ Hassan argues that social theory must take into account the changing logic of our machines (Hassan 2003). Not the first to emphasize the socially constructed nature of ‘clock time’ and its role in shaping the industrial revolution (Thompson 1967; Zerubavel 1982), Hassan describes ‘clock time’ as the experience of time as a linear progression of events. It is a temporal ribbon that typifies the mechanical and social reality of factory work where machines and people are now coordinated to, and judged in accordance with, the clock. However, multiple conceptions of time are experienced in parallel and “the creation of the network has simultaneously created a digital environment, and an information ecology that generates its own temporality” (Hassan 2003, p. 234).

According to Hassan, communication technologies have triggered a shift in our relationship to time such that people now act in accordance with a new logic of immediacy and simultaneity. As such tools become embedded in the physical and social spaces of our daily lives we are constantly negotiating between our individual temporal patterns and those represented by the technology. As we employ these technologies to create and maintain specific relationships to the world, we may discover a disconnect between the capacity for constant information transfer and current patterns of social life. While technologies incorporate a capacity for virtually simultaneous and numerous interactions, there may be reasons to prefer temporal gaps and a uni-directional focus in communication. According to Karl Hörning and colleagues, if we do not consciously acknowledge differences between humans and the logic of machines, interaction with information technologies may end up locking people into accelerated and seemingly inextricable social and material temporal patterns (Hörning, Ahrens, and Gerhard 1999).

These expansive views of the relationship between evolving information technologies and shifts in social experience are evocative. They stimulate inquiry on the nature of life in the

twenty first century. However, such theories are not wholly grounded in the realities of everyday life. They do not focus on how technological shifts are experienced by individuals who, within certain physical and social configurations, actively negotiate daily existence. As such, these theories often attribute social change to technological advances and carry deterministic assumptions. This dissertation is informed by broad ideas about the nature of connectivity in an 'information age,' but it also honors the mutually constituting relationship that evolves as particular people, situated within specific social environments, take into account a new communication medium when orchestrating their daily lives.

Micro perspectives on connected individuals

Towards the micro end of the analytical spectrum, theories of information processing delve into how people interact with a new information environment. This work illuminates individual differences and the cognitive stress involved in managing a world layered with access to, and interruption from, new technologies. Terms such as 'information overload,' 'multi-tasking' and 'polychronicity' take on new meaning when the potential to send and receive technologically mediated information becomes ubiquitous and embedded in daily life.

Perceiving a shift in how and when information gets addressed, organizational scholars have begun to explore the effect of working in a 'polychronic' manner. Polychronicity refers to the tendency to simultaneously engage in multiple tasks or to treat interruptions as equal to planned activities (Cotte and Ratneshwar 1999). Such work argues that polychronicity is a personal preference (Conte, Rizzuto, and Steiner 1999; Palmer and Schoorman 1999). Further, it has been argued that in situations where individual polychronic preferences do not match with those of a work group, people experience lower levels of satisfaction, organizational commitment and performance (Slocombe and Bluedorn 1999). Current work on polychronicity looks at the practices of engaging in multiple overlapping conversations, or 'multi-communicating' in technology enriched workplaces (N. Lamar Reinsch, Turner, and Tinsley 2008).

Both polychronic and multicommutating practices imply interruptions. Depending on how interruptions are perceived, the strength of the interruption, and the nature of the task at hand, disruptions can be experienced as negative or positive. Negative interruptions disrupt the flow of work and lead to the sensation of 'time famine' (Jett and George 2003; Perlow 1999). Yet, interruptions can also provide crucial information, social interaction or cognitive rest (Jett and George 2003). While the costs of interruptions are often the focus of current studies, scholars have also found that those who multi-task with information technology show increases in productivity (Gandal and Van Alstyne 2005).

Information professionals are interrupted by messages in numerous channels carrying different degrees of urgency and implying different levels of personal control. Ethnographic time analysis of managers, data analysts and developers provides detailed accounts of the multi-tasking pressures felt by professionals in the modern world. A series of studies by Gloria Mark and colleagues finds that work fragmentation is common and interruptions are experienced as stressful and detrimental to focus. Mark's work reveals that people spend an average of three minutes focused on a task before being interrupted and when tasks are grouped according to "working sphere"⁴ the average time focused on a sphere jumps only to 11 minutes (Auslander 2005; Gonzalez and Mark 2004). In a follow-up lab study Mark explored the relationship between the type of interruption and the task at hand. Here she found that while people may be able to accomplish email tasks efficiently under the pressures of regular interruption, this is not without cost. After only 20 minutes those interrupted felt significantly more stress, frustration and effort than those not challenged by interruption. Further, even those interruptions perceived by subjects as beneficial (interruptions that shared a context with the current task) caused individuals to suffer the same net disruption costs (Mark, Grudith, and

⁴ Gonzalez and Mark define 'working sphere' as "a set of interrelated events, which share a common motive (or goal), involves the communication or interaction with a particular constellation of people, uses unique resources and has its own individual time framework." Gonzalez, Victor M. and Gloria Mark. 2004. "Constant, Constant, Multi-tasking Craziness": Managing Multiple Working Spheres." Pp. 113-120 in *CHI Conference on Human Factors in Computing Systems*, vol. 6. Vienna, Austria..

Klocke 2008). Similarly, a time diary analysis of a variety of information professionals using Microsoft Office found that subjects reported difficulty switching from tasks that required focus and significant delay in getting back on track (Czerwinski, Horvitz, and Wilhite 2004).

Several scholars theorize a point of diminishing returns for the productivity associated with interrupting work involving communication technologies. For example, research suggests that instant messaging may serve to accelerate the process of completing isolated tasks at the cost of longer term productivity (Rennecker and Godwin 2003). Professionals in executive search who were observed to multi-task and showed greater productivity also reported higher levels of perceived information overload (Gandal and Van Alstyne 2005). Further, psychological experiments have shown that individuals both forget and distort a message when it is interrupted by another message (Cotte and Ratneshwar 1999).

These micro perspectives shed light on how individuals receive and process information via new media. Such work highlights how individuals experience messages differently depending on when, where and under what circumstances they are received. However, this work rarely incorporates the social aspects of information processing (Brown and Duguid 2000). How we make sense of information also depends on who we are receiving it from and how it enables us to project our self to others. The 'meaning' of information is socially negotiated and the 'effect' of new information technologies is a social process as much as an individual experience.

Social and action centered perspectives

This dissertation employs an empirically based micro-sociological perspective on the process by which individuals within an organization appropriate and use wireless email devices within a social context. This work follows the tradition of scholars who employ field-based

techniques to explore the mutually constituting relationship between individual actions, social structuring⁵ and technological artifacts (Barley 1986; Barrett and Walsham 1999; Bechky 2003; Orlikowski 2000; Zuboff 1988). Heeding the call of those who assert that a nuanced understanding of the dynamic relationship between humans and technology requires research that focuses on specific instances of use-in-practice (Hörning, Ahrens, and Gerhard 1999; O'Mahony and Barley 1999; Orlikowski 2002)⁶ this dissertation remains grounded by the specific and evolving practices of use within a particular context while offering rich insights for future research. As Carl Hörning and colleagues assert,

In order to form an opinion on the consequences of the application of modern technologies for time practices, it is essential to examine what significance technology is given in its concrete and practical application, how it is embedded in everyday life and what shape it assumes in the relational structure with time and communication practices. It is only in such a relational structure that technology takes its shape and forms its own specific complex of potential energy and efficacy (Hörning, Ahrens, and Gerhard 1999 pp. 302).

⁵ I use the language of 'social structuring' in order to invoke the ongoing practice of using technology in light of a specific social context. Wanda Orlikowski provides the most succinct and rich description of how individuals structure their use of a technology via their relationship with a shared social context. In this dissertation I use the term "social structuring" to refer to process by which individuals develop a shared, evolving, structural context that simultaneously informs, and is informed by, individual practices. In the words of Orlikowski, "Users also draw on their knowledge of and experience with the institutional contexts in which they live and work, and the social and cultural conventions associated with participating in such contexts. In this way, people's use of technology becomes structured by these experiences, knowledge, meanings, habits, power relations, norms, and the technological artifacts at hand. Such structuring enacts a specific set of rules and resources in practice that then serves to structure future use as people continue to interact with the technology in their recurrent practices. Thus, over time, people constitute and reconstitute a structure of technology use, that is, they enact a distinctive technology-in-practice." Orlikowski, Wanda J. 2000. "Using Technology and Constituting Structures: A Practice Lens for Studying Technology in Organizations." *Organization Science* 11:404-428. Pg. 410.

⁶ According to O'Mahony and Barley, "The dictum to study use and situated meaning, instead of received meaning and anticipated use, could significantly alter and deepen our appreciation of how digital telecommunications are affecting work and organizations. Studies of use might well lead to findings that depart from, if not challenge, the rhetoric of expectations common in the popular press and industrial circles and, thereby, foster a more veridical image of the range of social changes that digital telecommunications can occasion." O'Mahony, Siobhan and Stephen R. Barley. 1999. "Do Digital Telecommunications Affect Work and Organization? The state of our knowledge." *Reserach in Organizational Behavior* 21:125-161. Pg. 154.

This dissertation is such an endeavor. My understanding of the data is informed by several streams of research: a rich legacy of social identity theory; certain nuanced perspectives on how people orient toward and use new technologies within social contexts; and dynamic theories of the mutually constituting relationship between individual practices and enacted social structures.⁷ The remainder of this chapter outlines the theoretical perspectives that undergird this research.

Practice perspectives and theories of social identity

According to Karl Weick, “the communication activity is the organization” (Weick 1995 p. 75).⁸ And people do not communicate in a vacuum. In any organization, communication activity is a central mechanism in getting things done. Whether in the service of designing something, selling something, or providing internal services, people communicate in order to do their job. Therefore, any attempts to understand the effects of a communication technology must start with the day-to-day practices of the people using the technology; people who are each situated within an occupation, a presumed organizational function, and a specific role.

The ‘practice turn’ in organizational studies emphasizes that life is better conceptualized as ongoing activities. In the minute tasks of daily life individuals reflect their understanding of their job, the overall goals of the position, and the reward and expectation structures that influence

⁷ Anthony Giddens has a specific idea of ‘structure’ that further informs my understanding of the concept. From this perspective ‘structures’ are not objective entities. Rather, structures are enacted practices that exist as memory traces and are the rules and resources which enable and constrain action and interaction. The ‘duality of structure’ emerges from the idea that structural properties are both the medium and the outcome of practices they recursively organize Giddens, Anthony. 1984. *The Constitution of Society: Outline of the theory of structure*. Berkeley: University of California Press.

⁸Weick follows this assertion by outlining six elements he asserts are the common core of organizations. Number six is, “the social forms of organization consist basically of patterned activity developed and maintained through continuous communication activity, during which participants evolve equivalent understandings around issues of common interest.” Weick, Karl E. 1995. *Sensemaking in Organizations*. Thousand Oaks, CA: Sage. Pg. 75.

their activity. Individuals do not exist as vessels to be filled with organizational knowledge or explicit policies. Rather, we experience ongoing *knowing* (Cook and Brown 1999; Cunliffe and Shotter 2006; Orlikowski 2002), *learning* (Lave and Wenger 1991), and *working* (Barley and Kunda 1992) though physically and socially situated practices (Brown and Duguid 1991; Brown and Duguid 2001). From this perspective, action and the products of action are implicated in a tangle that is neither linear nor distinct.

Communication activity is similar to knowing, learning or working. Communicating is integral to operating in organizations. Decisions about when and how to communicate reflect the daily pressures of negotiating a specific functional role in a specific social environment. Through the act of communicating, individual decisions are challenged, ignored or reaffirmed by social interlocutors. This is a process of sensemaking, identity affirmation and alignment between the individual and the social. Through local experimentation with each other, and the material elements of an environment, people develop a sense of what it is to *do* a job and what it is to *be* a job. Embedded in doing is being. If employees think of themselves as 'good workers,' 'creative innovators,' 'ambitious movers,' or 'cantankerous old cusses' they will do their job differently and have a particular psychological and physiological experience of their daily tasks.

Identity is a sense of self. It is both how an individual sees him/herself and who they want to be. People are powerfully committed to a variety of salient identities. Each is an aspect of our most intimate personal worlds. Yet, identities exist within, and are dependent on, material and social contexts. It is through the physical world of objects and social relations that we discover the repertoire of identities available, create identity(s) in light of material and social contexts, and practice projecting such identities to others and ourselves. Our identities do not exist in isolation; they are lived and experienced in all the messiness of daily life.

The 'father' of symbolic interactionism, George Herbert Mead, pinpoints interaction as the central process through which individuals develop their sense of 'self' and their sense of the shared social context. Interaction introduces individuals to the perspectives of others and enables the mutual development of shared expectations. Over time, we internalize

innumerable conversations, amassing and abstracting a generalized view of how others within a particular context are likely to respond. According to Mead, this internalized dialogue between the individual and this 'generalized other' is the basis of the self and operates continuously throughout life (Mead 1967 (1934)).

A long history of scholarship builds on Mead's insight that individual identity is intricately related to social interaction (Berger and Luckman 1966; Van Maanen 1979). Social identity theorists do not conceive of identity as a static state or embedded cognitive trait. Identities are situated, contested, multi-layered articulations that emerge through the interplay between individual sense-making and social situation. Therefore, identity emerges from, and exists within, relative 'figured worlds' (Holland, Lachicotte, Skinner, and Cain 2001). Individuals hold multiple identities that become more or less salient depending on context, relevant cues and physical environments (Stryker 1980). Although ideas differ as to the relative stability and conscious work involved in maintaining coherence, social scholars agree that identity is lived and enacted in the context of physical space, material objects and social worlds.⁹

Within organizations, research has focused on the processes of how individuals identify with organizationally salient roles and the implications of identification. Scholars have explored the process and consequences of identification in numerous domains: cultural roles (Ibarra 1999; Rafaeli, Dutton, Harquail, and Mackie-Lewis 1997); status hierarchy (Elsbach 2004); occupations or professions (Kreiner, Hollensbe, and Sheep 2006; Van Maanen and Barley 1984);

⁹ Various scholars take the perspective that identities are a lived experience of self that must be continuously and reflexively maintained. Such perspectives emerge from multiple social theories and use various terms to denote a perspective of lived identity. Examples include identity as a 'performance' Goffman, Erving. 1959. *The Presentation of Self in Everyday Life*. New York, NY: Anchor Books, Doubleday., a 'narrative project' Gergen, Kenneth. 1991. *The Saturated Self: Dilemmas of Identity in Contemporary Life*: Basic Books, Snow, David A. and Leon Anderson. 1987. "Identity Work Among the Homeless: The Verbal Construction and Avowal of Personal Identities." *The American Journal of Sociology* 92:1336-1371., an 'emotional labor' Hochschild, Arlie. 1983. *The Managed Heart*. Berkeley, CA: University of California Press. a 'politicized enactment' Butler, Judith. 1991. *Gender Trouble: Feminism and the Subversion of Identity*: Routledge. and an 'engulfed self' Adler, Patricia and Peter Adler. 1991. *Backboards and Blackboards* New York, NY: Columbia University Press .

and specific companies (Dutton, Dukerich, and Harquail 1994; Hatch and Schultz 2002). As an extension to this work, organizational identity researchers have shown that identity threats carry implications for work process (Elsbach 2004), interpersonal relations (Rafaeli and Vilnai-Yavetz 2004) and ability to respond to environmental changes (Nag, Corley, and Gioia 2007). In essence, identity is a crucial aspect of organizational life. In the words of key scholars, “identity and identification, in short, are root constructs in organizational phenomena and have been a subtext of many organizational behaviors” (Albert, Ashforth, and Dutton 2000 pg. 13).

Certain identity domains act as more consistent guiding forces than others. Occupational roles have been shown to be a locus of deep identification for individuals (Van Maanen and Barley 1984).¹⁰ As employees are increasingly less likely to work for the same organization for an extended period, people look beyond employee ‘types’ and organizational environments to create a more lasting sense of self in a professional context. What it is to be a good lawyer, designer, salesman or financial analyst holds more weight in establishing and maintaining a sense of the individual’s self than a particular kind of employee in a particular organization. Some argue that work has become the defining identity domain in the modern age. According to Porter and Kakabadse, “Work is increasingly central to personal identity... Whereas people formally derived fulfillment from family, friends and religion, work for many has become the primary source for relating to others” (Porter and Kakabadse 2006, pp. 537-538).

¹⁰Organizational identity also informs individual action. Studies find that if a firm is able to engender identification with the organization, members are more likely to act cooperatively, increase communication, and believe that acts on behalf of the group are the same as acts on behalf of self. Dutton, Jane E., Janet M. Dukerich, and Celia V. Harquail. 1994. "Organizational Images and Member Identification." *Administrative Science Quarterly* 39:239-263. It follows that in such environments individuals may assert this identity via various communication acts, fostering good relations with their peers and generating organizational citizenship. Ehrhart, Mark G. and Stefanie E. Newmann. 2004. "Organizational Citizenship Behavior in Work Groups: A group norms approach." *Journal of Applied Psychology* 89:960-974. Because my dissertation study examines different functions within the same organization, organizational identity is kept relatively constant and I am able to unpack the differences stemming from different occupational identities. The salience of occupational identity was prevalent throughout these data.

Occupational identity crosses several levels of abstraction. Occupations are embodied and given life within organizations. Therefore, in order to be a good “X” individuals must perform the job of “X” within particular situations. A lawyer working in-house for a company has a different job and day-to-day demands than a lawyer working in a large corporate firm. However, both identify as ‘lawyers.’ Both perform daily tasks with a generalized sense of how a typical ‘lawyer’ should approach the task and act in a social situation. Actions invoke feedback from colleagues (both within the organization and broader occupational counterparts) and individuals compare this feedback to their sense of an occupational ideal. This identity prototype is stable and fluid; expansive enough to encompass situational discrepancies but flexible enough to shift in response to innumerable inputs.

Social identity and categorization scholars discuss how individuals “tend to classify themselves and others into various social categories . . . defined by prototypical characteristics . . . [that] enable[s] the individual to locate or define him or herself in the social environment” (Ashforth and Mael 1989 p. 20). This theory relies on individuals creating idealized occupational representatives. “Prototypes are typically not checklists of attributes but, rather, fuzzy sets that capture the context-dependent features of group membership, often in the form of representations of exemplary members or ideal types” (Hogg and Terry 2000 p. 123). An individual’s occupational ‘prototype’ emerges through a process of sense-making, combining and performing aspects of the social role. Education, background, media and cultural conversations merge with ongoing interactions and specific role models to form an individually specific, but socially constructed, idealized type (Ibarra 1999). This process exemplifies Mead’s description of a ‘generalized other’ that becomes an intimate aspect of individual experience.

Because occupational identity is a locus of deeply held values and orientations toward the world, it is vulnerable to explicit and implicit means of control (Anteby 2008; Van Maanen Forthcoming). Individuals strive to maintain a coherent sense of self and uphold an occupational prototype that enhances that self. They may subjugate their own needs, or be subjugated by others, in order to reach that goal. On the flip side, identifying with an occupational ideal may enable individuals to buffer their professional ‘self’ from negative

feedback. If individuals are operating at the level of occupational identity, they are able to ignore organizational or interpersonal criticism as long as it does not threaten their occupational status. If communicating in a certain way is not seen as enhancing the occupational role, individuals may frame a device such as a BlackBerry as extraneous to, or at odds with, performing their job.

Even though the occupational prototype is an internalized ideal it is also socially constructed through daily practice. Performing a role is more than a series of tasks. It is a continuous relationship between doing and being. An individual becomes a 'type' of person by enacting a role in a specific context with the social confirmation of specific others. To be a good 'lawyer,' 'designer,' or 'salesperson' requires doing a specific job in a specific location and learning the tacit and embodied realities of the role. Identities are constituted through a relationship between the individual, their immediate colleagues and the generalized 'occupational-other.' Each element influences the other and the 'lawyer' or 'sales representative' who emerges is continuously a work in progress. Identity shapes practice, but through practice, identity is developed and experienced.

Communication activity is a central vehicle through which individuals project and maintain identities. While every moment in a social situation can be construed as a situation to project and maintain salient identities, such identity performances are heightened when parties are attempting to communicate. When the goal is transferring information, both substantive and symbolic, interlocutors focus on learning from each other and about each other. New communication technologies affect opportunities for communicating and the experience of projecting and receiving communication acts. Therefore, such technologies are intricately related to identity performance and shared work practice.

Theories of 'technologies-in-use'

Using a new communication technology is not a straightforward process. Every user, situated within a particular context, creates an initial idea of how use of a new tool might affect his or her daily life and sense of self. Of course, this idea is never static. As a user experiments

with the tool, receives feedback from others, and interacts with evolving social norms, his or her sense of the device evolves.

Constructionist scholars examining technology-in-use have shown the multiple ways that users will interpret the same technology in different lights depending on their social, organizational and functional contexts (Edmondson, Bohmer, and Pisano 2001; Orlikowski 1992; Robey and Sahay 1996). Numerous elements such as the cultural and political climate (Prasad and Prasad 1994), nature of the work and internal power dynamics (Barley 1986; Orlikowski 1992) influence how users experience a tool in practice. Such contextual elements are then continuously re-enacted and re-created through ongoing use of the technology. As such, they are always available for evolution and change. This scholarship has not explicitly referred to identity in the multiple elements that inform how users engage with technologies-in-use. Nevertheless, the user's sense of self affects how they make sense of their social environment and the technologies available within it. Thus, it is useful to add identity to the layers of meaning (social norms, political dynamics, individual desire, etc.) that influence how individuals use a technology and become influenced by that use.

While the features of different communication media do not determine use, they do affect the nature and form of information available during interaction. Facial expressions, handwriting style, vocal intonation and speed of responsiveness are potentially important clues that people interpret throughout an interaction in order to qualify and make sense of informational content. Some of these cues are available through technologically mediated modes of communication, some are not. Further, new cues take on additional meaning as users negotiate the range of features embedded in different communication technologies. In discussing the application of Goffman's dramaturgical lens (Goffman 1959) in analyzing new communication media Josh Meyoritz explains the relationship between technology and social behavior.

For the model suggests that to "be" a certain type of person generally requires the appropriate social situations and audiences. Any factor [i.e. communication media] that restructures social stages and reorganizes social audiences, therefore, would have a great impact on social behavior. (Meyrowitz 1985 pp. 33).

The features of a communication technology do not determine what can be communicated through its 'channel.' Humans communicate and the technology mediates that effort. Therefore, how the technology works affects what is communicated: How many people can be included in a communication act? How easy is it to access incoming messages? How many words fit on the handheld screen? How stable is the battery and wireless service? Each of these features affects how people use the technology and how they approach communication acts via the device. As such, the interplay between users and tools shifts patterns of access to information and affects social interaction and the generative process of developing and maintaining salient social identities. Meyrowitz continues,

[E]veryday behavior is susceptible to change by new medium of communication because social roles are inextricably tied into social communication. Social identity does not rest in people, but in a network of social relations. When social networks are altered, social identities will change. In any given social period, roles are shaped as much by *patterns* of access to social information as by the content of information (Meyrowitz 1994 pp. 58-59).

Users do not approach a new tool as a suite of features. Rather, they approach it as a potential locus for action.¹¹ The driving question is not, "What does this *technology* do?" but "What might this technology allow *me* to do?" In terms of a communication technology, this question goes beyond 'doing' and into the realm of 'being.' Given the intricate relationship between the social and the self that is developed and maintained through communication, users must also ask themselves, "Who or what might this communication technology enable

¹¹ This perspective emerges from James Gibson's insight that animals perceive their environment in terms of how physical objects might afford a specific need or action. Gibson, James. 1979. *The Ecological Approach to Visual Perception*. New York, NY: Houghton Mifflin. This stream of work on technological affordances highlights the flexible and enacted relationship between user and tool. According to this perspective, technologies do not do things; they afford people the capacity to do things. What the technology actually affords the user depends on physical properties of the object but is equally indebted to the user's imagination, current needs and environmental context. In a similar relationship, I argue that technologies not only afford people to *do*, they afford them to *be*.

me to *be*?" Answers to these questions emerge in light of potential users' interpretations of how a tool might enable them to do and be their job.

Technological frames of reference

Initial expectations, work practices, and occupational identity all inform initial interpretations of a new technology. Initial orientations color how users will choose to experiment with the technology, what feedback they are open to receiving, and the norms they participate in creating. Understanding the elements involved in creating an initial orientation towards technology helps to unpack the constructivist finding that technology-in-use is rarely replicated across contexts (Leonardi and Barley 2008).

The term 'technological frame' was applied by Orlikowski and Gash (Orlikowski and Gash 1994)¹² to describe how the situated context and perspective of different actors will frame how they approach and use a new technology. Defining technological frames as,

[T]hat subset of members' organizational frames that concern the assumptions, expectations, and knowledge they use to understand technology in organizations. This includes not only the nature and role of the technology itself, but the specific conditions, applications, and consequences of that technology in particular contexts (Orlikowski and Gash 1994, p. 178).

Orlikowski and Gash describe how groups of users who have similar expectations and interactions with a technology develop overlapping frames that guide understanding and use. Such frames become a way of knowing the world and orienting action. If different groups within an organization develop incompatible technological frames, they argue that technological deployment and organizational outcomes suffer. This initial outline of the concept of

¹² The concept of technological frames of reference was developed by Trevor Pinch and Wiebe Bijker. Bijker, Wiebe and John Law. 1987. "Shaping Technology / Building Society: Studies in sociotechnical change." in Cambridge, MA: MIT Press. However, the work of Orlikowski and Gash centers on how preconceptions affect initial choices regarding use rather than development and design of new tools.

technological frames of reference opened many avenues for further work, some of which have been pursued (see Davidson 2006 for a review). In general, work in this area has focused on tracing differences in frame content and political contests that develop when technological frames play out in an organizational context.¹³

While the concept of technological frames of reference has continued to intrigue scholars, little work actually investigates the interpretive process that goes into the development of technological frame domains within organizations.¹⁴ In an attempt to address this oversight, I look to the process by which individuals actively engage in forming opinions about the ‘nature of the technology,’ their organization’s ‘technology strategy,’ and how they make sense of these opinions within their situated context. It is in this stated context that ‘technology-in-use’ becomes a viable concept. I argue that within organizations people interpret a new technology in light of an ongoing interplay between work practice and occupational identity. Every employee is constantly engaging in a job and hence, in the identity that they associate with that job. Technological frames of reference thus also involve a user’s sense of how a new tool will affect this interplay between work and self.

¹³ Specifically, Orlikowski and Gash outline the following frame domains:

- i. Nature of Technology—refers to people’s images of the technology and their understanding of its capabilities and features.
- ii. Technology Strategy—refers to people’s views of why their organization acquired and implemented the technology. It includes their understanding of the motivation or vision behind the adoption decision and its likely value to the organization.
- iii. Technology in Use—refers to people’s understanding of how the technology will be used on a day-to-day basis and the likely or actual conditions and consequences associated with such use.

Orlikowski, Wanda J. and Debra C. Gash. 1994. "Technological Frames: Making Sense of Information Technology in Organizations." *ACM Transactions on Information Systems* 12:174-207.

¹⁴ Davidson, in particular, asserts that in order to gain theoretical traction from a concept that is inherently grounded in contextual experience, scholars must examine both the origin and structure of technological frames. According to Davidson, “Increasing research emphasis on framing as an interpretive process could move TFR research beyond the issue of frame incongruence to questions related to frame structure and interpretive power” Davidson, Elizabeth. 2006. "A Technological Frames Perspective on Information Technology and Organizational Change." *Journal of Applied Behavioral Science* 42:23-39.

Theories of enacted social contexts and practices of social structuring

Technological frames of reference are useful in understanding how individuals initially make sense of a new tool. Initial frames orient initial use. But they do not determine how people employ a device over time. Use is a dynamic and evolving process. And frames are not static. Ongoing decisions about when and how to use a tool are directly influenced by an individual's current social relations. Action orients interpretation and frames evolve over time. As individuals use a communication technology they participate in the flow of communication acts and evolving assumptions that reflect the ongoing negotiation between individual experience and social situation. Such negotiation evolves into shared expectations and group norms.

Given the potentially radical effects of new technologies on work and communication practices, actors within shared social worlds are motivated to develop and maintain norms regarding appropriate use of new communication media. Shared expectations increase predictability of group behavior. Such predictability saves time and energy in coordinating interaction (Feldman 1984) and can serve to increase confidence that an individual's role in the group is maintained (Gersick and Hackman 1990). In the deepest human sense, understanding and enacting a shared social context is the cornerstone of protecting individual 'face' (as well as the 'face' of others) and asserting oneself as a competent social actor (Goffman 1959).

Goffman's description of the social ordering of conversation is applicable to all media that facilitate interaction.

In any society . . . a system of practices, conventions and procedural rules comes into play which functions as a means of guiding and organizing the flow of messages. An understanding will prevail as to when and where it will be permissible to initiate talk, among whom, and by means of what topics of conversations (Goffman 1959 pp. 33-34).

In each communication medium a new 'system of practices' (or scripts) emerges through ongoing practice and implicit negotiation. This system is influenced by prior expectations. For example, how people make sense of their BlackBerrys may reflect their understandings of cell phones and desktop email. Yet, the 'system of practices' that develop around BlackBerry communication are not a transferable conglomeration of expectations and assumptions

transported from different environments or communication media (Meyrowitz 1985). A shared 'system of practices' is not additive, nor is it created in a vacuum. Norms and shared expectations reflect shared understandings of moral rights and obligations that develop, within a social and cultural context and in regard to a specific communication technology. According to Giddens,

The constitution of interaction as a moral order may be understood as the actualization of rights and the enactment of obligations. There is a logical symmetry between these which, however, can be factually broken. That is to say, what is a right of one participant in an encounter appears as an obligation of another to respond in an 'appropriate' fashion, and vice versa; but this tie can be severed if an obligation is not acknowledged or honored, and no sanction can effectively be brought to bear (Giddens 1984 pg. 106-107).

Thus, norms concerning email processing are one element in the constant drive to reproduce and maintain social stability through micro-interaction. As the potential for email access expands, the 'logical symmetry' between communication acts shrinks. As devices become more mobile and omnipresent they influence shared assumptions about obligations; if one partner knows the other has the capacity to be available then unavailability suggests a conscious choice, a severing of the tie.¹⁵ Given the economic and psychological motivation to 'succeed' in an organizational environment, individuals may feel it would be professional suicide to unilaterally disconnect and choose to ignore social norms that their actions create and re-create (Mazmanian, Orlikowski, and Yates 2006).¹⁶

¹⁵ Goffman's 'rule of self respect' and 'rule of considerateness' argued to influence individual action throughout encounters is based on a similar understanding. Individuals are motivated to follow this norm of reciprocity in order to maintain their own face and face of others. Goffman, Erving. 1959. *The Presentation of Self in Everyday Life*. New York, NY: Anchor Books, Doubleday.

¹⁶ In a similar vein, Castells foresees grave consequences for geographical locations that are not connected to the network of information flows, "Indeed, in some instances, some places may be switched off the network, their disconnection resulting in instant decline, and thus in economic, social and physical deterioration." Castells, Manuel. 1996. *The Rise of the Network Society*: Blackwell Publishers Ltd.

Any active participants in organizational life will observe and take into account how others are using their wireless email devices. These observations shape initial framing and figure into how individuals choose to engage with the device. For example, if enough people start to use their BlackBerrys to monitor email and stay connected during expanded hours, others in a tight communication network might assume that in order to maintain their position in the group they should behave in the same way. Observations evolve into shared assumptions about general behavior. And shared assumptions take on symbolic value as they act back on the social environment, encouraging individuals to shift their understanding of what are considered 'normal' communication patterns (Middleton 2007).

Assumptions turn into expectations about appropriate behavior as they become taken-for-granted elements of the social environment. This can occur without conscious stimulus or direct expression. It does not have to be experienced as overt social control. Shared expectations can be invisible, unacknowledged and perceived as individual choice (Bettenhausen and Murnighan 1985; Gersick and Hackman 1990). Individuals may think of their behavior as a voluntary contribution to a group that they believe will enhance success of the group or their status in the group (George and Jones 1997). Hence, even as people explicitly discuss limiting their use of wireless email devices they may continue to create an implicit norm of availability.

Expectations of accessibility regarding time that is 'on' and time that is 'off' are not set in stone (Zerubavel 1981). The 'proper' time for interacting is typically based on a shared understanding, which emerges from a history of repeated experience. "Thus, it is usually considered appropriate to call someone on the telephone some time past the temporal boundary beyond which an actual visit would be regarded as an intrusion" (Zerubavel 1979, p. 42). Given that understanding of time is socially constructed, tools such as wireless email devices that mediate interaction in new ways provide an opportunity for re-negotiating accessibility.

As groups develop temporal structures (consciously or not) that define what they consider appropriate availability and responsiveness to the device (Orlikowski and Yates 2002), these

shared understandings become a reality that each individual must take into account when making choices on how to use the device. Users in a network develop a sense of each other's communication reputation and develop provisional hypotheses about others' use patterns. Such shared temporal structures are influenced by organizational context, features of the communication medium, and individual identity. For example, knowing everyone in a network owns a device eliminates the 'plausible deniability' that a message was not received (Nardi, Whittaker, and Bradner 2000). Organizations dealing with fluctuating information push individuals toward greater speed and responsiveness (Eisenhardt 1989) and people who identify with work-related roles are willing to abide by escalating expectations (Stryker 1980).

Exploring the use of BlackBerrys offers a lens into the tension between individual agency and collective socialization. The features of BlackBerrys promise constant interaction *and* individual autonomy. Such a combination appeals to a western culture which remains steeped in the faith of individual agency. Individuals may feel in 'control' of BlackBerry use but their choices create and maintain social expectations. Such expectations influence and arbitrate individual decisions. Individuals make judgments (and are thus judged) in terms of their social milieu. By enabling the experience of autonomy while potentially tightening the threads of concertive social control (Barker 1993), BlackBerrys serve as a bellwether technology, providing insight into the evolving characteristics of organizational life in the information age.

Drawing on the perspectives outlined in this chapter, this dissertation takes a social identity and practice perspective in order to shed light on the processes by which individuals, in the context of their social communities, frame and use a new communication technology. In doing so, it contributes to enriching the scope and explanatory value of each of these theoretical perspectives. In addition, it uses the "technological frame of reference" concept in order to highlight the importance of initial orientation in understanding the direction of an evolving relationship between user and tool. While employing this concept as an explanatory reference point, I hope to make a theoretical contribution toward unpacking the process by which technological frames change over time.

Wireless email devices are a singular object of study. They herald the progression toward increasingly accessible, mobile and embedded technologies. Hence, this research contributes to a stream of work oriented around placing technologically mediated communication practices within a broader social context (Brown 2001; Cooper 2001; Dourish 2005; Gergen 1996; Green 2002a). This endeavor is informed by the affordances of wireless email devices. Their current configuration as asynchronous, text-based, hand held tools that link people to their primary (organizationally provided) email account enable and constrain certain user experiences.

As such, this research also contributes to literature on digital shifts. It takes into account how the features of a communication technology might play a role in the experience of communicating via a particular avenue. Yet, it focuses on the relationship between the features of a specific device and ongoing practices of people situated in specific social and occupational worlds. It extends work on technologies in practice by highlighting the key elements that informed how the potential for expanded accessibility was enacted within different organization functions, and engendered different outcomes in terms of personal goals and desires.

Finally, this research contributes to the endeavor of grounding theoretical ideas in the messiness of everyday life. Only through understanding the situated interplay between individuals and bounded social collectives as mediated through communication technologies can we begin to assess the implications of the 'information age.' For, it is people who are creating, maintaining and experiencing the dramatic socio-technical shifts that characterize the modern world.

Chapter 3: Context and Methods

Technological Context

Email is asynchronous and generally text-based.¹⁷ It affords delayed responses, multiple recipients and a record of interactions (Markus 1994; O'Mahony and Barley 1999; Sproull and Kiesler 1986). Wireless email devices couple these features with hand-held size, battery power and potentially constant connectivity. For BlackBerrys in particular, the system automatically and continually forwards email from a company server¹⁸ to the mobile device via cell towers.¹⁹ BlackBerrys thus allow easy access to a primary email account virtually instantly and from almost anywhere.²⁰ In line with Research in Motion's (RIM™) original business model, firms often purchase a suite of devices for employees along with an internal server to capture messages and maintain firewalls. Therefore, employers often provide employees BlackBerrys so they can have mobile access to an organizationally provided email account. Accessing email through the BlackBerry is relatively quick and uncomplicated. Users need not be at the office, their desk at home, or even in a laptop wireless zone. Assuming the device is on, no time is wasted starting a computer, logging into the internet connection, or waiting for email to download. The system

¹⁷ Email has become more and more dynamic. It currently enables the transfer of documents, audio and video files, and power point presentations via attachments. HTML based email messages also allow for the embedding of images in the body of a message. In these data the primary form of email was text based.

¹⁸ While individuals can purchase wireless email devices through cell phone providers, RIM's original business model provided dedicated BlackBerry servers to companies. This continues to be the dominant configuration.

¹⁹ The speed and reliability of the wireless connection is subject to signal strength and coverage and is often reported to exceed that of cell phones.

²⁰ BlackBerrys are multi functional devices which incorporate an email client, wireless access to Microsoft Outlook calendars, web browsing, cell phone capability. This research focused on the experience and use of wireless email via the BlackBerry. I attempted to get a full picture of how individuals used the device and made a point of asking how much, and when, they used other features. It became clear early during field work that while people did use the BlackBerry for a variety of activities, they considered email to be the primary function of the device. This was reflected in usage patterns as well as their symbolic understanding of the BlackBerry as an email device associated with work.

persistently 'pushes' email to the users,²¹ who can view and reply to these messages (or initiate their own messages) through the use of a trackwheel and thumb-operated full QWERTY keyboard.²²

BlackBerry email is often described as unobtrusive.²³ BlackBerrys enable a communication experience distinct from that of cell phones. Users reported that while wireless email devices enable constant connectivity in a manner similar to cell phones, the experience of use was noticeably different. Interaction with the device is not heard by others in a user's physical space. In contrast to cell phone use, the public space is not being "destroyed" and "colonized" (Katz and Aakhus 2002) with one-sided conversations. Further, the user is not cornered into a verbal response expected by the norms of telephone conversation. Users in this study, and in my prior research, described how the asynchronous and text-based features of BlackBerrys enabled a sense of short-term control over incoming communication that feels distinct from their experiences with cell phones (Mazmanian, Orlikowski, and Yates 2006). Anticipating this development, Castells presciently noted in 1996 that,

Time delayed answers can be easily overcome, as new communication technologies provide a sense of immediacy that conquers time barriers, as much as the telephone did but with greater flexibility, with the communicating parties able to lapse for a few seconds, or minutes, to bring in other information, to expand the realm of communication, without the pressure of the telephone, ill-adapted to long silences (Castells 1996, p. 46).²⁴

²¹ Users can choose not to have email constantly pushed to the device. No one in this study chose to configure their device this way.

²² The exact features of BlackBerrys and similar devices are constantly evolving. In 2008 RIM introduced a device modeled on Apple's iPhone that is manipulated through a touch screen. As this study focuses on the experience of expanded access to email rather than usability considerations, my findings are not undermined by evolution in these devices.

²³ This sense of the device pervades cultural accounts of BlackBerrys. It was also obvious in these data.

²⁴ This observation holds for email accessed via computers and laptops as well. However, the ubiquitous functionality of mobile devices facilitates the sense of immediacy in overcoming temporal barriers that Castells anticipates.

In contrast to verbal communication, text messaging via cell phones is functionally similar to interacting with email via a wireless email device (especially as more phones integrate QWERTY keyboards). However, research on text messaging highlights how people interpret texting as a ‘back channel’ technology that lends itself to specific communication acts distinct from email messages (Licoppe 2004; Mazmanian and Erickson 2007). Such practices evolve from the social process of technology structuring as well as subtle functional differences between text messaging and wireless email. Engaging with both wireless email and text messaging entails mobile practices carried out in various physical surroundings. The social context for wireless email is often rooted in the workplace while text messaging has no such fixed contextual bearings.

This is particularly true in the case of the BlackBerry, which, from its inception catered to private industry, supporting the “power business user” and recently advertising as “a stylish way to get things done.”²⁵ As an extension of desktop email, wireless email came on to the social landscape with a pre-existing layer of meaning as a tool to support work or professional activities. This legacy informs how users engage with wireless email even when email is delivered to the very same mobile device as that used for cell phone conversation or text messaging. Thus, much of the symbolism that users layer onto wireless email, at least in its current instantiation, involves establishing or preserving organizational norms of conduct and maintain a professional identity. Text messaging, on the other hand, did not evolve from a pre-existing desktop practice and is not used in the same business context. Text messages are not integrated into an organizationally provided email account and therefore are experienced as a channel of communication not inherently associated with work. Further, the fact that mobile text messages do not appear in a threaded format renders the experience distinct.

²⁵ See <http://rim.com/index.shtml> for additional examples of business symbolism surrounding the BlackBerry device.

Like wireless email, text messaging can take place in diverse temporal and physical locations. However, when one sends a text message they know that it will be received in a similarly mobile environment. The text message is guaranteed to be received on a mobile device and is therefore embedded into a recipient's current activity and physical location. Messages may be saved but do not lend themselves to archiving and manipulation. This enables a shared sense that 'texting' is intimate, transient, and often secondary to demands of the physical environment. Wireless email, on the other hand, is simply one manner to access a primary email account. A sender does not know if the message is received on a laptop at home, a desktop computer at work, or in the car on a BlackBerry. Therefore, the burden is on the recipient to negotiate when and where they are going to view and potentially respond to the message.

New mobile phones come with text capability. This infrastructure coupled with the private nature of cell phone numbers (no public directories) further contributes to use of text messaging as a medium for personal or intimate social exchange. People can only text those in their cell phone address books. Research reveals that they often use this 'back channel' communication medium to send missives of love and friendship or strategic coordination within physical space (Ito and Okabe 2005). Further, text messaging interlocutors scope their interactions on much larger time scales, communicating over the length of a day or for weeks, instead of counting minutes between replies. Regarding scripts between intimates, Licoppe notes that these messages tend to occur throughout the day, but in no specific temporal pattern. He dubbed the practice 'connected presence' because text messaging can afford interlocutors an impression that each enjoys an intimate, but principally asynchronous, open channel to the other. It is the constancy and content of these connections - typically indicated by number, not timing - that constitute scripts of intimacy (Licoppe 2004). Table 1 outlines how the features of wireless email devices in their current configuration compare with other technologically mediated communication channels.

Table 1: Features of technologically mediated modes of communication²⁶

Feature	Communication mode					
	Wireless email (via handheld device)	Traditional Email (via laptop or desktop)	Instant Messaging (via laptop or desktop)	Telephone conversation (via hand held device)	Text messaging (via hand held device)	Voice Mail
Visual/Text-based	✓	✓	✓		✓	
Asynchronous	✓	✓	✓		✓	✓
Push-delivery	✓		✓	✓	✓	
Soundless interaction	✓	✓	✓		✓	✓
Portable	✓	✓		✓	✓	✓
Free-range connectivity	✓			✓	✓	✓
Primary channel of communication	✓	✓				

BlackBerrys can act as a relatively unobtrusive conduit into the practice of sending and receiving email messages. As such, they place the burden on the individual to negotiate when, where and how to communicate in the guise of organizational citizens in expanded physical and temporal locations. People who actively use the device to integrate work related communication into expanded settings must engage in ongoing coordination as they negotiate ‘presence’ in multiple realms. BlackBerrys do not layer work communication on top of personal communication in a linear manner. In contrast, they enable the combining and blurring of interaction orders (Goffman 1983). Users must establish when and where they choose to interact with email. Such ‘choices’ are informed by individual preference and demands as well as social and practical considerations of performing personal and professional roles. Further, they must learn to become

²⁶ I have chosen not to include newer media such as Facebook and Twitter because this research focuses on point to point interactions.

fluent in multiple stages of interaction, and interaction orders, at once. Use of this mediated and embedded form of email interaction implies an effect on self, groups, social structuring, and organizational life. Hence, my desire to understand the evolution and experience of BlackBerry use over time.

Focusing on the inherent tensions and dualities emerging from BlackBerry use involved developing an understanding of the recursive relationship between individual actions and practices of social structuring. Broadly, taking this perspective enables research to acknowledge individual agency while exploring social dynamics that situate action. In my opinion, the richest sociological theory can present the mechanisms by which the individual connects to the social, the short term with the long term, and the physical with the virtual and reveal the influence of each upon the other. This involves searching for patterns of action among individuals, keeping a sharp eye on the context of interaction, and illuminating norms, assumptions and shared expectations. In other words, one should respect the experiences of individuals while constantly searching out the invisible strings of social life.

Research Site

Two overarching questions informed the nature of this research endeavor: I entered the field asking how the potential for expanded access to email would be enacted within different social contexts over time and what might be the conditions under which people would experience different consequences from the use of wireless email. In order to address these questions, and assess the relationship between individual experience and the evolving understandings of a device, my findings are based on longitudinal research conducted within two functional groups at a single firm as they adopted and adjusted to using BlackBerrys.

Linden, a mid-sized (approx 6000 employees) footwear and apparel manufacturer, chose to provide BlackBerrys to their top 183 managers in June 2005. In the fall of 2005 they rolled out the devices to their entire US sales force (91 people). Linden is a multi-functional company. They design, manufacture, source manufacturing for,²⁷ and distribute shoes and clothing across the globe. Linden operates retail and factory stores as well as selling to retail sites across the US, Europe and Asia. Internal services include a substantial financial team, legal team, human resources, and a department to support community service activities.

During the period of data collection Linden was a well respected firm with markedly loyal employees. Turnover was low for the industry, and individuals regularly expressed their appreciation of the culture of the firm. People were friendly, informal, and collegial. People throughout the hierarchy were casually dressed; however, I was reminded numerous times by interviewees not to judge the environment by external appearances that belie the high expectations, a fast paced environment, and ongoing challenges. Lateral moves were encouraged and those willing to take on different roles throughout the company were often those promoted. People described working long hours and wanting to 'give back' to a firm they felt was special.

At the time of this research BlackBerrys were not common in the footwear and apparel industry. This was a key motive in my choice to pursue this research site. I welcomed the opportunity to focus a research lens on an environment that was not seen by informants as technologically savvy or advanced. Linden employees did not see themselves as representative of the stereotypical BlackBerry user. They did not describe direct counterparts in similar companies who used such devices.

²⁷ A small percentage of shoes are produced in Linden owned factories in South America, the rest are contracted to factories across Asia.

Even though BlackBerrys were not widespread in footwear, they are a cultural phenomenon. Regardless of industry, these users were aware of the cultural story of ‘crackberrys.’ In popular media the BlackBerry is framed as a potentially ‘addictive’ and pernicious, yet prestigious, tool for the “mobile information professional”²⁸ (see Introduction for details and citations). As such, users at Linden approached the device with preconceived, if generalized and nebulous, notions of its potential effect on individual and organizational life.

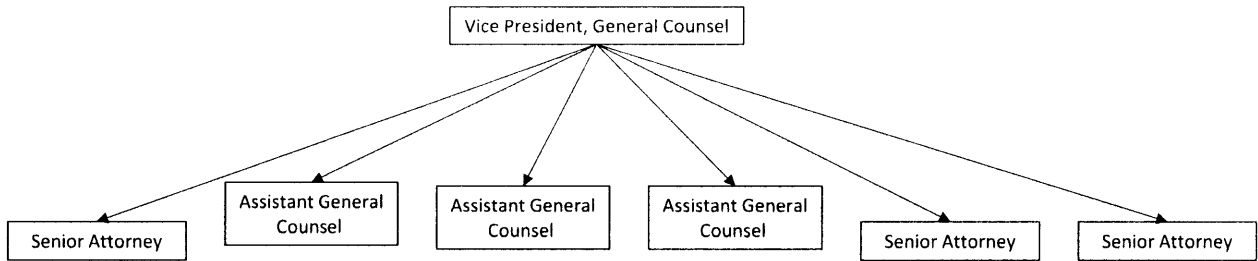
This study was structured to permit internal comparison. Looking at patterns of use as well as individual and social experience, I compared users who occupied different levels of the hierarchy, engage in different travel patterns, hold distinct relationships to the core product of the company, vary in the nature of their core communication acts, and embrace distinct occupational identities. This dissertation centers around the experience of two internal functions that proved to be a source of fruitful comparison within Linden: the in-house legal counsel and the U.S. mobile sales force. Appendix 1 provides a full breakdown of all interview subjects from the in-house legal counsel and U.S. mobile sales force by gender, age, level and position in the company.

In-house legal counsel

At the time of field work, Linden employed seven in-house attorneys. Three men and three women worked for a General Counsel who was a senior officer and sat on the operating committee of the firm. Figure 1 is a graphic representation of the structure of Linden’s legal team.

²⁸ “Mobile information professional” is the term coined by RIM as their primary population for the first BlackBerry devices released in 1999. This population encompasses individuals who travel regularly and deal in information goods, such as investment bankers, venture capitalists and lawyers. These industries were the first to achieve BlackBerry saturation. By the time I conducted a research project with representative users in 2004, BlackBerrys were ubiquitous throughout these professions.

Figure 1: Structure of Linden Legal Team



During the mid-point of data collection (fall, 2006) average tenure for the Linden legal team was five years with no attorneys having worked at Linden for over nine years. Five of the seven attorneys had come to Linden from a large corporate law firm within the last ten years. These attorneys had different areas of expertise. Some specialized in labor law, others in contracts, securities, real estate, patents, marketing or IT. However, the daily practices involved in work are fairly similar: Linden attorneys review documents, participate in negotiations, and offer legal advice. It is communication intensive work and a vast majority of the ‘product’ they offer is written. Linden attorneys worked with different internal “clients,”²⁹ typically the heads of business units or the senior officers in the company. Occasionally, multiple lawyers would take on a major project, either because the issue was large and complex or because expertise in different aspects of the law was required.³⁰

Although communication overseas was common, these lawyers were not regularly traveling. Most international legal issues were contracted out to external counsel in the country in question. Linden attorneys worked closely with external counsel and managed their

²⁹ Linden attorneys use the term “clients” to denote internal colleagues who ask for their legal services.

³⁰ The structure of the work is different than a large corporate law firm that organizes work through project groups. Project groups consist of representatives from every level of a strict hierarchy and divide the work accordingly. Communication is shared among the project group and expectations of availability and responsiveness have to be negotiated within each team.

activities from a distance. Even with occasional ‘blow-ups,’ the job was not generally volatile or unpredictable. The general counsel evaluates the rest of the legal team by their perceived work ethic, dedication to client service and ability to juggle multiple projects. These factors also inform internal reputations.

Linden attorneys were co-located in the firm’s headquarters. They generally worked with open doors and were regularly seen laughing and joking in the common areas. Individual lawyers popped into each other’s offices and encouraged internal clients to follow suit. They were conscious of their service role in the company and strove to make themselves available and open to internal clients. Attorneys regularly cited the chance to work with clients on an ongoing basis, and to be part of a shared effort to further the success of one organization, as reasons for why they chose a job in-house. As part of this mission they described striving to make themselves visible and approachable. Although it was relatively rare to see people in the top echelon of the firm eating lunch in the dining hall, the legal team -- including the General Counsel -- regularly ventured downstairs to eat together. This was not simply a tactical move to be visible to internal clients. Linden attorneys bridged work and personal relationships and remained close outside of the office. I heard of individuals running together, going out to dinner together, attending each other’s birthday parties, and sharing family events.³¹ All were married and ranged in age from 35 – 60.

U.S. field-based sales force

At the time of data collection, Linden’s U.S mobile sales force consisted of approximately one hundred people, ranging from field service representatives to vice presidents. Women made up

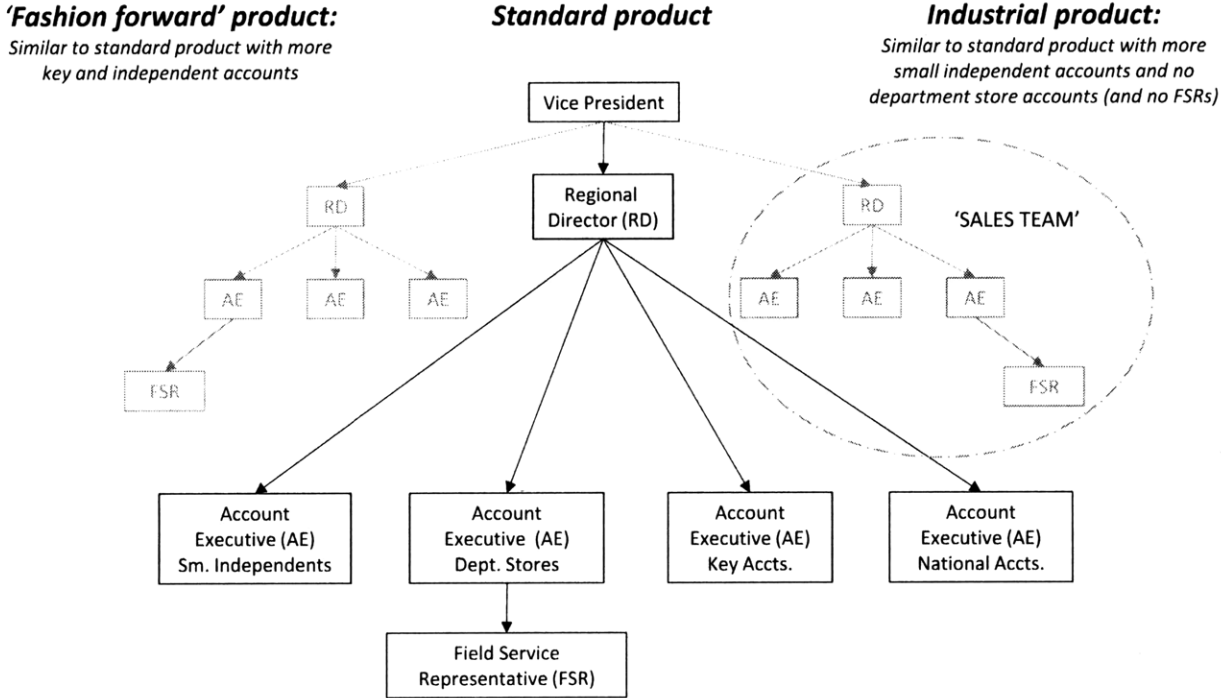


³¹ Six attorneys had children under the age of ten. The General Counsel regularly carves out time to spend with grandchildren.

approximately 30% of the population and generally occupied lower levels in the hierarchy.³² Linden created distinct lines of shoes that were segmented to different markets. Two of these lines (the standard and 'fashion forward' lines) carried between fifty to one hundred shoe styles for each season; the third (industrial line) sold ten to fifteen new shoes a season. Within a line, some sales representatives sold to department stores, some to 'mom and pop' independent accounts, some to independent 'key' accounts, and some to large national accounts such as FootLocker™. Each line operated in a hierarchical pyramid structure. Within a product line, sales representatives selling to all accounts in a physical region report to a regional sales director. The grouping of four to five account executives selling within a region and their immediate supervisor (regional director) is referred to as a 'sales team.' Regional directors reported to a vice president of the product line. The four vice presidents reported to the senior vice president of domestic sales. Linden also employed field service representatives who worked in department stores conducting training sessions with retail staff and managing product stocking and display. Figure 2 is a graphic representation of the structure of Linden's U.S. field based sales force.

³² Of the seventeen field service representatives employed, twelve were women. In contrast, only five of the twenty people at director level or above were women.

Figure 2: Structure of Linden Sales Force



Sales representatives experienced the job differently depending on the line they were attempting to sell, the region of the country they operated within, the specific boss they reported to, and the nature of their accounts. Nevertheless, the diverse positions in Linden sales shared similarities. Across the board, sales representatives describe themselves as relationship builders. Building a connection with accounts and creating the sense of a personalized and personal connection with their buyers is a core element of the job. Additionally, sales representatives determine their own schedule and spend most of their time on the road.

Aside from vice presidents, all traveled extensively and did not have permanent offices at headquarters. Most worked from their homes, though some had access to 'offices' in product showrooms in major cities. The typical field service representative, account executive or sales director was on the road three to four days a week. Depending on their individual territories, they might leave in the car in the morning and return that evening or take flights and overnight

trips. For those who didn't have dense territories, it was common to spend upwards of one hundred nights a year on the road. Each member of the sales force also attended three multi-day shoe conventions and three off-site Linden sales meetings a year. Additionally, managers were regularly called to headquarters for product line reviews and meetings to gather input on regional trends.

A typical day on the road consists of visiting accounts, driving, and visiting more accounts. Sales representatives may visit an account to give a formal product presentation or drop in to see if the account needs restocking or promotional assistance. During selling season, account representatives who service numerous small accounts set up product presentations in hotel rooms around the country and schedule a string of presentations with local stores. Those in charge of key accounts were continuously trying to foster their relationships with accounts and felt that informal visits were important opportunities to discuss strategy and convince stores to give Linden product premium wall space. Sales directors often rotated between their direct reports, traveling with them and meeting accounts. Field service representatives visited department stores to display product, train salespeople, and update fixtures and promotional materials.

In sales, revenue numbers are the bottom line for the company and the employee. Although Linden sales representatives do not work for commission, they are evaluated via established sales goals.³³ Account executives either make their target sales numbers or they do not. An individual's relationship to this predetermined number affects bonuses, reputation and career

³³ Most sales people described preferring the stability of a regular salary at Linden over the ups and downs of commission based sales. They generally feel their salary is adequate or generous. Some noted that they could make more in the short run selling a 'hot' line of shoes. In the fall of 2006: Field Service Representatives were paid between \$40 – \$55 thousand dollars a year; The three levels of Account Executives between \$60 – \$130k; Directors and Managers between \$115 – \$180k; and Vice Presidents and Sr. Vice Presidents between \$185 – \$400k. Bonus percentage ranged from 10% (FSRs) to 40% (VPs) of annual salary. The typical account executive is working toward a 30% bonus.

trajectory. Regardless of position in the sales force, individuals relished their individual autonomy and emphasized self-driven motivation.

Sales work at Linden was designed in such a way that competition between representatives was kept to a minimum. Sales representatives related a perception that Linden was unique in fostering a collaborative sales environment. Individuals were rarely at odds with each other in terms of developing new accounts. The regional and account segregation kept overlap of potential accounts to a minimum. They did not compete toward shared sales goals. Representatives aimed to meet a target number that was tailored specifically for them. This number was based on their region, their accounts, and their past numbers.

In this setting, sales representatives described their peers in warm and collegial terms. Numerous sales representatives emphasized the unusually low turnover and long tenure within Linden sales. At the midpoint of data collection the average tenure within the sales force³⁴ was six and a half years, and 24% of these sales representatives had worked at Linden for ten years or longer. It was common for a sales representative to move up in the internal hierarchy, shifting between product lines and account types, often moving to a different state, as they progressed through a career at Linden. As such, sales representatives had the opportunity to meet and develop friendships with colleagues across the country. I was struck by how often sales representatives told stories about each other during interviews and many emphasized that Linden was atypical in the close friendships shared by sales representatives.

Most sales representatives described regularly checking in with colleagues via their cell phone while driving between accounts or waiting in airport lounges. Such calls were described as both friendly and functional. Phone conversations were an opportunity to share gossip, commiserate, and engage in friendly dialogue. They were also important opportunities to discuss how specific shoes were selling, brainstorm tactics for dealing with a difficult boss or

³⁴ Tenure calculated for the 81 sales representatives employed the Account Executive position or higher.

account, and share ideas for increasing numbers. Friendships were strengthened during regular face-to-face contact with colleagues during product line close meetings at headquarters, bi or tri-annual sales meetings, and major shoe conventions. Each off-site Linden meeting incorporated a community service event that forced colleagues to work together in a new way. Further, the 'retreat' mentality of sales meetings and shoe conventions is conducive to late night socializing. I heard abundant stories about both service events and late night shenanigans. Therefore, while sales representatives were not working side by side on a daily basis,³⁵ they saw each other with relative frequency and relied on each other for social support and tactical advice.

The sales team ranged in age from 23 – 64. This age spectrum does not represent simple movement up the hierarchy as account executives (the middle position in the sale hierarchy) also range in age from 28 – 64. Many throughout the sales team are married, and young children are common among account executives.³⁶

Longitudinal Field Research

As an empirically based theory building endeavor (Eisenhardt 1989; Sutton and Staw 1995), this research centered on qualitative methods that could help expose internal tensions in the complex and often contradictory relationship between individual orientations, shared assumptions and IT use.

³⁵ An exception to this statement is the 6-8 individuals who worked out of the New York showroom. These sales representatives had semi-permanent 'cubbies' and would see each other two to three days a week.

³⁶ Women, however, find it difficult to raise a family and hold a job that requires such extensive travel

I entered the field in June, 2005 when I was invited by Human Resources to observe the off-site leaders retreat where BlackBerrys were ‘rolled out’ to 183 top managers.³⁷ I came to the retreat having visited headquarters twice and having met only five Linden employees. Therefore, this experience proved to be a “getting my feet wet” research endeavor. I spoke to as many people as possible and tried to present myself as a neutral party trying to understand their impressions of the BlackBerry.³⁸

Throughout the three day retreat I attempted to assess initial reactions and get a sense of preconceived notions of the device. I observed informal conversations between users and watched as people began to ‘play’ with the device. Further, I engaged numerous people in informal conversation regarding their assessment of the device and opinions as to why it was provided by management. I was interested in understanding their sense of expectations, fears or hopes for how it might affect their work. My aim was to get a general sense of how individuals initially made sense of the capacity for expanded access to email and how the

³⁷ Prior to rolling out the BlackBerry at the off-site leadership retreat, HR had engaged in a spirited debate about why the firm was giving BlackBerrys to people and what expectations the device implied. Certain people in HR were concerned that individuals would use the BlackBerry in a manner similar to the stereotypical “crackberry” addict. They did not want individuals to feel that the company expected this behavior and took pains to explicitly frame the device as enabling flexibility, individual freedom and personal work style. During the time that they were engaging in this internal debate a key contact in HR heard a story on NPR about BlackBerrys . One of my co-advisors, JoAnne Yates, was one of the voices in this story. Dr. Yates discussed our prior research on BlackBerry use by mobile information professionals. This HR manager felt that our research addressed some of the questions they were debating within Linden and she contacted Dr. Yates. Initially, my HR contact asked if we would be willing to give a presentation on our prior research and help guide Linden HR in the attempt to best introduce BlackBerrys to the firm. Dr. Yates inquired whether Linden would be open to acting as a field site for our ongoing stream of BlackBerry research. The Senior Vice President of HR was open to the idea. My project proposal was approved by the firm’s operating committee and I was invited to attend the off-site leadership retreat where BlackBerrys were introduced. By the time that I completed this dissertation, HR had undergone numerous changes. My key contact at HR left the firm in my last months of field work in spring, 2007. The Sr. Vice President of HR left in early 2008 while I was analyzing data.

³⁸ A senior executive in the firm happened to have an MBA from the MIT Sloan School of Management so I was explicit in mentioning that we did not have a prior or current relationship. I assured people that my project was approved by senior management but was a research endeavor that was not intended to provide strategic feedback to senior management. My sense was that people understood my position and were not hesitant to share their honest opinions of their jobs, the company and their expectations regarding the BlackBerry. This comfort continued to grow over time.

explicit attempts by HR to deliver the device with a certain message affected this sense. I observed how the tool was introduced and spoken about formally by senior officers and informally in the bar, in the bathroom and during 'down time' between meetings. I paid specific attention to episodes where a senior person modeled BlackBerry behavior or individuals 'taught' others what it could do or enable.

The leadership retreat also allowed me to get a sense of the company. I was exposed to the language they used to describe themselves, their formal discussions of strategic vision and ongoing challenges and how they viewed themselves in reference to key competitors. I received a crash course in the structure and products of the firm and made key contacts that led to future interviews. I made a conscious effort to let people know that while management had approved my project, and knew of my presence, I was not a consultant or feeding specifics back to senior officers. My sense was that people generally felt comfortable with my participation in informal activities. I sat in on large and small meetings, socialized after hours, engaged in a community service event and tried to sit down next to a stranger at every meal. My initial proposal to Linden included longitudinal data gathering. Therefore, I made a point to share with potential subjects during the retreat that I planned on being a presence at the company for at least a year and hoped they would be willing to speak with me in the future. The overwhelming majority of people were receptive to this idea and graciously offered to be of assistance. Within the following week I sent follow up emails to everyone I had personal interaction with at the retreat. Over 90% of these Linden employees replied with a gracious offer to help the project however possible.

After my introduction to Linden at the offsite retreat I spent the next six months in the headquarters observing and conducting interviews three to four days a week. I conducted 107 exploratory interviews between June and November 2005. These interviews reflected a broad sample of users in diverse functions, geographical locations, and hierarchical positions. Interviews focused on exploring the nature of work within different organizational functions while getting a sense of shared values and organizational culture. Specifically, I asked individuals to describe in detail their communication patterns prior to receiving the device,

current communication patterns with the device, and expectations about the potential effect of owning a BlackBerry over time. Interviewees included current BlackBerry users as well as people in sales, who were slated to receive BlackBerrys in October, 2005.³⁹

Interviews generally lasted 60-90 minutes. Appendix 2 presents the final version of the evolving protocol I used to guide exploratory interviews. These interviews were purposely conversational and open ended. I encouraged the interviewee to talk and reflect while making sure that all topics on the protocol were covered. If I began to hear a theme in several interviews or discovered a topic that seemed relevant I included it as a specific theme for future interviews. The majority of interviews were performed in the individual's office or a private conference room at headquarters. I spoke with sales representatives by phone. During this time I also conducted the first of three mini-surveys through email to get a sense of first impressions of the device. Appendix 3 outlines the questions asked in each of these email surveys. During this first phase of field work I also attended three quarterly rallies held in headquarters. All Linden attorneys were invited to attend the rallies, which were streamed online in the company's intra-net for viewing across the globe. Within headquarters the rallies were very well attended. Rallies were led by the CEO and included presentations on strategic vision, financial numbers from the previous quarter, company announcements, and awards.

I then left the field for eight months. This absence was necessary to complete requirements for my progress as a PhD student.⁴⁰ I found that taking a 'before' and 'after' approach facilitated my research by enabling me to assess change over time and allow social norms to evolve. I returned to full time field work in July, 2006. Prior to my return I secured permission

³⁹ At the time of these initial conversations, members of the sales force did not know that the device was soon to arrive on their doorstep.

⁴⁰ During this time I finalized my Part II research paper on prior data, studied for and took my Generals exams and wrote a formal Dissertation Proposal. In order not to lose touch with my field site I held three check-in conversations with my primary contact at HR during this period. I also took the opportunity to follow up with three initial interviewees, made four site visits, and attended a firm rally.

from the Senior Vice president of U.S. Sales, the General Counsel, and the Vice President in charge of the development and design of one product line to focus intensively on these three functions in the company. Rather than attempt to follow up with the broad representation of interviewees from the first period of data collection, I structured the second period of data collection to enable a deeper understanding of select organizational functions. The logic behind this choice was an attempt to achieve nuanced understanding of change and outcomes over time. As a lone researcher, I did not have the time to give genuine attention to a broad swath of the organization. Rather, I chose to embed myself with the in-house legal team, the U.S. mobile sales force and one product design and development group because these functions were distinct in terms of travel schedules, communication patterns, relationship to email, expectations of work/life separation, power dynamics and relationship to the core product of the company.

From July, 2006 to May, 2007, I conducted intensive ethnographic field work within these three functions. I divided my time between them and spent roughly four days a week at headquarters or traveling to off-site retreats, product presentations, sales account visits and marketplace 'field trips.' I attended four company rallies, four product line reviews and innumerable meetings at headquarters. I rotated who I ate lunch with, made frequent visits to individual offices, helped unpack sample shoes, set up product presentations and spent as much time as possible as a 'fly on the wall' observing interactions between colleagues and watching individuals interact with the BlackBerry. Additionally, I attended the annual leadership retreat⁴¹ and an overnight off-site "inspiration retreat" with the product development group. I shadowed three sales executives and two field service representatives on account visits. I attended sales set-ups at hotels in New York and Los Angeles. I also shadowed product

⁴¹ This was considered the annual follow up to the leadership retreat I attended during my first days at Linden. Due to economic considerations and scheduling difficulties, it took place 18 months after the first meeting and was structured as a two day onsite meeting.

managers and sales executives as they took new product to 'key influencers' in the marketplace to get input and negotiate the design of proprietary shoe designs.

During this period I conducted 55 additional exploratory interviews, 23 'check-in interviews' with people I spoke with during my first phase of data collection, and 25 follow-up structured interviews reviewing specific email patterns on the BlackBerry. Phase II email review interviews consisted of a structured protocol where I sat down with informants and recorded data on each email message sent and viewed on the BlackBerry over a two to four day period. The interviewee described each email sent and received on the device while I recorded characteristics of each message as well as surrounding context. Informants saved recent emails prior to our interview, including ones sent and received on both weekends and weekdays, and sales people made sure to review a day of BlackBerry use while on the road. In structured interviews I recorded where and when people interacted with their BlackBerrys, the degree to which they monitored incoming messages, and the conditions under which they choose to reply to incoming messages or initiate contact through email. I also recorded message characteristics such as topic, formality, length, speed of responsiveness, and the number of people copied on a message. Appendix 4 is an example of a Phase II data collection form.

During the second phase of data collection I sent out two email mini-surveys to the entire BlackBerry user population throughout Linden and engaged in numerous email exchanges with informants. The three annual email questionnaires enjoyed a 67-85% response rate (see Appendix 3).⁴²

⁴² Because this dissertation focuses on two internal functions, I analyzed the survey responses for the specific population of users included in this dissertation. Quotes that came in the form of survey responses are noted as such throughout the text. I plan to do a full analysis of survey data at a later date.

Dissertation Data

This dissertation centers on the experience of the in-house legal counsel and U.S. mobile sales force. Although data from the product design and development group was extensive and rich, I felt it did not make a good counterpoint for this analysis. This team underwent significant upheaval during my time with them; the product suffered, several key people were replaced and there was an explicit attempt to shift power dynamics. Further, this was the only function in my data set that did not enjoy full BlackBerry saturation. Only those in the top positions of the internal hierarchy received the device and therefore it enjoyed greater symbolic status than apparent in the other functions. I chose to design my dissertation around exploring social dynamics that emerge when an entire communication network adapts to a new communication medium. Thus I focus exclusively on the legal and sales teams.⁴³ Therefore, this dissertation is based on data from on-site fieldwork, 83 semi-structured interviews, and 19 Phase II email protocol interviews. See Appendix 1 for a description of interview subjects whose data is included in this dissertation.

I sat down with all 7 lawyers⁴⁴ on at least two occasions for official interviews and conducted telephone interviews with 6 of 7 spouses. I conducted a Phase II structured email protocol interview with all 7 attorneys. I conducted telephone and face to face interviews with 47⁴⁵ of 91 members of the U.S. sales team and 3 spouses.⁴⁶ I spoke with 19 people before they

⁴³ I plan to analyze my data on the product development group at a future date. This group was going through a change in leadership and explicit attempts to shift work processes and power dynamics. It will make an interesting story about internally driven efforts to change how designers approach their product, work with each other, and approach their relationship with other functions in the company.

⁴⁴ Given the small number of attorneys in the legal team I do not refer to people by position and the pseudonyms do not accurately reflect gender. I did not find these variables be a significant factor in experience of use and feel that anonymity would be compromised by referring to interviewees by gender or position.

⁴⁵ Of these forty five interviewees eight were female. This accurately reflected the gender breakdown in the sales force. Gender differences in experience with the BlackBerry were not obvious in these data.

knew they were slated to receive the device and was able to follow up by phone with 11 of these 19. In addition to these ‘before and after’ interviews I followed up with 4 people for multiple sit down interviews to trace use over time. I was also able to sit down with 12 different sales executives in person to conduct Phase II structured email protocol interviews.

Data Analysis

Throughout this research I sought to remain grounded to what I observed and heard in the field. Simultaneously, I engaged in an iterative process between structured analysis and brainstorming. My goal was to develop an understanding of patterns, links, and key concepts within the data. I crafted various explanations for individual and group behavior that seemed important to the process of BlackBerry adoption. I noted what informants told me was important to their experience while consciously paying attention to mixed messages and examples of how behavior might undercut explicit assertion. I then ‘tested’ these explanations against the data, looking for diverse examples, paying attention to any episode that appeared to challenge the current working hypotheses. This process of grounded data analysis and theory building was informed by a number of resources outlining perspectives on in-depth qualitative research (Becker 1998; Eisenhardt 1989; Emerson 2001; Glaser and Strauss 1967; Strauss and Corbin 1998; Van Maanen 1988). Details of my process of data collection and analysis are outlined below.

⁴⁶ Unlike Linden attorneys, the sales people were generally reluctant, if not against, inviting me to speak with their spouses. This did not appear to reflect an attitude toward me or the research study but their overarching orientation toward work/life separation. Three spouses of sales representatives agreed to be interviewed. They did not have strong opinions about the BlackBerry and all reported not noticing when, or if, their spouse was using the tool. This experience of the device is consistent with reports by sales representatives that they did not generally use the BlackBerry around family.

Every moment in the 'field' is an opportunity to learn and observe. I constantly kept a running commentary to myself in spiral bound notebooks. My field notes represent every thought, observation, and detail that crossed my mind. I wrote down every episode of BlackBerry use, reference to the device or observation of its presence. Although my focus was on BlackBerry use, I paid close attention to the messiness of daily organizational life. I noted my impressions of general organizational dynamics, the physical layout, and any 'random' observation that crossed my mind. Sitting in on meetings, I took detailed notes on work process, communication styles and power dynamics. I also befriended several administrative assistants and sought them out for regular feedback on their impression of organizational dynamics. I typed up these notes in a running commentary to myself. Additionally, I wrote regular brainstorming memos where I attempted to flesh out my impression of the organization as a whole and extract key dynamics relating to BlackBerry use. I shared many of these memos with my advisors, who provided useful feedback and dialogue regarding what seemed fruitful to pursue.

Prior to delving into granular data analysis I wrote 'within case' reflections. These memos represented 'a day in the life' narratives where I outlined my understanding of how Linden attorneys and sales people experienced their jobs. This included a typical travel schedule, daily work practices, power dynamics, and relationships with colleagues and family. I also described my sense of how people's understanding of the BlackBerry shifted over time. These memos enabled me to focus my thoughts when initially reviewing interviews and field notes. However, in many cases my impression shifted when confronted with the actual data. After such an episode, I returned to my initial memos and noted evolution in my own thinking. At this time I also wrote an initial 'key issues' memo where I attempted, from memory, to pinpoint when and

where the BlackBerry was experienced as enabling or constraining to work practice or interpersonal relationships.⁴⁷

All interviews in this sample were recorded with the interviewee's knowledge and permission. The vast majority were transcribed by an outside service.⁴⁸ I reviewed and polished transcriptions, reviewing the audio recordings when necessary. After establishing that the transcripts were as clean and accurate as possible I used NVivo8 qualitative analytic coding software to 'code' the data. Beyond interview transcripts I coded field notes, internal documents, email exchanges and responses to the annual email survey by the informants specific to this dissertation. Each of these data sources was integrated into NVivo8 and became part of the coded data chunks. I was able to sort and manipulate these chunks as I developed and tested my ideas regarding theoretical 'findings' against concrete data.

Data coding and analysis has been an ongoing endeavor that is intricately connected to the process of theory building and writing. My coding progressed from noting comments and observations that seemed 'interesting' to pulling out and refining analytic categories. My understanding of the phenomenon deepened and I was able to highlight key analytic dimensions. I would then review, refine and gather coded data along these dimensions, continuously integrating specific examples and reevaluating analytic categories. After establishing what I felt was a key analytic category (such as 'pre-conceived notion about the BlackBerry,' or 'relationship between BlackBerry email and core communication acts') I reviewed and refined the codes subsumed within it, gathering all relevant data and comparing observations within and across groups. These within and across case comparisons often evolved into informal memos to myself noting episodes that challenged my thinking.

⁴⁷ These reflection documents were written after I took a three month break from data gathering and analysis to have a baby and adjust to motherhood.

⁴⁸ I transcribed fourteen interviews personally due to poor audio quality or the need to weed through a Phase II interview for specific statements.

Throughout this process I would review prior memos to refresh my memory and interrogate my own analysis. These data illustrate the experiential elements of carrying a device, implications of this experience, and the ties between social context, individual choice, and evolving norms.

In order to render the data from Phase II interviews into a usable format, I transcribed all of the email data into excel spreadsheets. Within a spreadsheet, data rows represent, for each informant, the list of messages sent and viewed on the device. Each message was then followed by columns outlining descriptive variables. For viewed messages these variables include: the time the message was received by the server; when the subject believed they viewed the message; the general topic of the message; the number of people copied on the message; if, when and how the subject responded to the message; where the subject was when he or she viewed the message; what else was going on in the physical environment and any noteworthy psychological response to the message. Sent messages were coded in reference to the same variables, with the exception of when the message was received and viewed and the addition of a description of what initiated the subject's decision to send a message. I further noted the subject's assessment of whether or not this data was representative of typical email patterns.

For this dissertation, I conducted preliminary analysis on Phase II email protocol data. I counted numbers of messages viewed and sent during and outside of traditional business hours. I further analyzed some of the descriptive characteristics of messages and messaging behavior. Descriptive characteristics of messages included the percentage of BlackBerry emails that listed multiple people in the address fields, messages to and from customers and clients, messages conducted across time zones and 'off hour' emails that were perceived as urgent. Descriptive characteristics of messaging behavior included analysis of how often people were checking their BlackBerry during 'off hours.' Where the device was kept in the house, whether the device was carried on personal errands or family outings, and how often they checked the BlackBerry in front of friends or family. Appendix 5 is an example of the Excel spreadsheet I developed in order to code and organize these data.

An integral part of my data analysis was writing drafts of my dissertation chapters. The act of writing has continually forced me to clarify my thoughts and expound on my assumptions.

Further, the input from outside readers on my dissertation committee has proved invaluable in pushing me toward a greater level of theoretical insight. This dissertation is another step in a process of writing and analyzing this data and my committee has enabled me to reach this juncture with a theoretical sense of what I 'found' in the field as well as innumerable questions and quandaries to explore in this data and in future work. Writing a summary paper based on fieldwork and developing a concomitant talk also helped push my understanding of the data. This experience compelled me to elucidate the narrative arc of my process story. Further, it pushed me to jump a conceptual level and articulate the key elements that informed how and why a group experiences a new communication media along a trajectory of either sustaining or spiraling cycles of expectations.

Chapter 4: Linden In-House Legal Counsel

This chapter describes how Linden attorneys engaged with their BlackBerrys and each other during the first three years of carrying the device. It unpacks the process that underlies how individuals initially framed and made sense of the BlackBerry prior to using the device. It then describes how initial frames influenced individual patterns of use and the interplay between using a new communication medium and engaging in the daily practices of doing a job and projecting a valued occupational identity. Finally, it explores the links between how individuals engage with their BlackBerrys and the social dynamics that emerge as individual acts are observed and interpreted by communication partners. Such visibility of where, when, and how individuals are available via email on their BlackBerry evolved into shared assumptions and normative expectations that were experienced by the very individuals who contributed to establishing shared norms as a source of challenge and constrain.

In essence, this chapter describes a group of attorneys who shared initial excitement about the BlackBerry. Over time these same attorneys discovered that in the alignment between how they viewed themselves; and how they made sense of the capacity for mobile email, they created a social environment that implied serious personal consequences for individuals attempting to maintain balance between work and personal life.

Framing BlackBerrys: Linden in-house legal counsel

Prior impressions and introduction to the BlackBerry

BlackBerry impressions

Prior to getting their BlackBerrys, all seven lawyers⁴⁹ who made up the in-house counsel at Linden shared a general understanding that they were dealing with a technology that enabled people to be more responsive and available to work. This impression emerged from previous experience, cultural framing and interactions with external colleagues. Describing his impression of the BlackBerry prior to using one, Devin implied that people use BlackBerrys in a specific manner. According to Devin, “I work with lawyers [*external to Linden*] who use them all the time, and I appreciate that they have them.” Pressed to describe the source of his appreciation Devin said, “Because I know that I’m going to get a response [*to email messages*]. And know that I’m going to get a timely response.” This statement reflects the general impression of BlackBerry users shared by Linden attorneys. For these professionals, BlackBerrys implied an ability to be more connected to work at expanded temporal and physical locations. Ken, the only Linden attorney to have a BlackBerry at a prior job, carried views similar to those of the other attorneys but included an impression of the psychological experience of connectivity based on his own past experience.

Well, I am sure you hear this from people. It’s addictive. It’s so – I mean, people call it the ‘crackberry,’ and there’s definitely an aspect to it of constantly being dialed in and wanting to know what’s going on and needing to know what’s going on and hoping you didn’t miss – like needing to know every single development, and it becomes very addictive.

James echoed Devin’s and Kens’ assumptions that carrying a BlackBerry implies responsiveness and expanded availability. However, he referenced a broader perspective of humor and cultural framing:

They’re trouble. They’re trouble tools. [*laughter*] I saw a funny bit, I don’t know if it was Chris Rock, but some comedian talking about it [*the BlackBerry*]. But, it was like, you know, as you get older, you can’t make it through the night without going to the

⁴⁹ Given the small number of lawyers in this dataset I do not refer to people by position and the pseudonyms do not accurately reflect gender. In this context, I did not find these variables to be significant.

bathroom, so when you wake up at 4:00 in the morning, or 3:00 in the morning, to use the rest room, you fire off some emails so people will think you're working all night.

James implied that the BlackBerry is a tool for constant connectivity and impression management. His sense of the tool was informed by a cultural conversation about "CrackBerrys"⁵⁰ and was bolstered by personal observation. James reflected on the fathers he witnessed at the playground who interacted with their BlackBerrys rather than their children,

I see some of the detriments, and I'm trying to, -- like, the swing set, I've always wanted a tool for me to, you know [*be connected*], but you don't want to get sucked into the dark side of the BlackBerry. I'm sure you'd be playing a balancing game. There's too many horror stories. I see these guys out there that are just plugged in [at the playground]. You're like, what are you doing?

Monica revealed a similar assumption about the broader cultural framing of a device and her desire to use it in a manner that would work for her. She asserted that people will have to find moderation with something that will inspire people to "act like a 17 year old" and check emails constantly and mused out loud, "But I think I have the discipline to take it off to the side, but it's going to be hard to do that. I'm a little concerned about it."

Linden attorneys approached BlackBerrys from their position in a broad cultural conversation. They were legal professionals working as in-house counsel. They were not the first adopters of BlackBerrys, but had witnessed legal colleagues outside of the company integrate the tool into daily life. They formed impressions of how the BlackBerry might affect their lives based on interpretations of the tool that emerged from their observations of external colleagues, cultural framing, and, in one case, memory of past use. The legal team embraced a sense that the BlackBerry enabled a level of professionalism, but individuals voiced a desire to be conscientious about not falling into patterns of use that mimicked the stereotypical BlackBerry "addict." Initially, the ability to be more available and responsive seemed positive to

⁵⁰ See Introduction and Conclusion to this dissertation for a more expansive discussion of 'CrackBerrys' as a cultural object.

these attorneys. Prior expectations merged with the situational perspective of the BlackBerry that developed as the tool was introduced to employees at Linden. Table 2 provides a breakdown of initial impressions of the BlackBerry among Linden attorneys.

Table 2: Initial impressions held by in the Linden legal department

	Initially positive	Initially negative	Initially ambivalent
Interviewees spoken with prior to receiving the BlackBerry. N = 3	3	0	0
Recollections from interviewees spoken with after receiving the BlackBerry. N = 4	4	0	0
Total N = 7	7	0	0

BlackBerry ‘roll-out’

Linden attorneys qualified their expectations of the BlackBerry in terms of how the tool was introduced in the context of Linden. Four of the lawyers received their BlackBerrys during the leadership retreat in June of 2005 when the device was rolled out to 183 employees at a certain pay grade in the internal hierarchy. Within six months, the other three lawyers, who were initially classified at a lower level, banded together and presented a case to the General Counsel that given their position in the company they needed a BlackBerry to successfully perform their jobs. These three were soon given the tool.⁵¹

For the four attorneys who attended the leadership retreat, their initial impression of the BlackBerry was colored by how the senior officers of the company framed the device at the retreat. Aware of numerous cultural stories that assume BlackBerrys ‘force’ people to be more connected to their work, disconnected from their family, and responsive 24/7, Linden HR made a conscious effort to guide the initial framing process.

⁵¹ And, though unrelated to their asking for the device, all three were soon given a promotion that would have put them in the pay grade to receive one automatically.

Presented as a gift,⁵² the BlackBerry was wrapped in a decorative bag and placed in the hotel rooms of each individual.⁵³ The battery on the device was pre-charged and the IT group pre-configured each BlackBerry with the user's organizational email. In other words, the BlackBerry was ready to use out of the box. Further, a help desk staffed with representatives from RIM, T-Mobile, and the internal IT department was set up throughout the retreat. Along with general user materials about the BlackBerry, HR wrote a personal message introducing the user to the device and describing the company's goals and official expectations. Included in this letter was a list of normative 'do's and don'ts' including do "use it to create greater flexibility in your job" and don't "keep it by your bedside" or "feel like you have to respond to emails 24/7." The letter employed friendly language emphasizing individual control and flexibility with the BlackBerry. HR wrote,

Welcome,

We're always looking for new ways to make the challenges of your job a little less...challenging. To help manage your work and your teams more easily and efficiently—and to make communicating a little more fun—we're offering you the enclosed BlackBerry® device.

Although it can keep you in the loop 24 hours a day, seven days a week, we'd rather you didn't put it to the test! This tool should give you greater flexibility in your job—not make your job more demanding.

Because we're a diverse group with varied work styles, accepting the BlackBerry® device is optional. You're under no obligation to keep it. And, if you're excited now, but later decide you don't want it, you can return it to the Global Help Desk.

Appendix 6 provides a full version of this letter.

⁵² No mention of cost was made during the roll-out. The cost unit (or organizational function) of each employee given a BlackBerry was charged an upfront fee for the device and projected service costs (\$300 per device). The cost unit also covered the monthly service fees for the device.

⁵³ Along with the BlackBerry was promotional literature about the company, a t-shirt and a free pair of shoes.

Going beyond the written materials, senior officers made a point of reiterating the goals of the company and setting initial norms through formal presentation of the device. On the first day of the retreat a Sr. Vice President stood before the entire audience and described expectations of the BlackBerry. On stage with the CEO and COO of the company the Sr. Vice President emphasized,

It is intended to help facilitate work, not add to work, to your already saturated task load. It is supposed to help you optimize work, not take over your lives. In your materials is a list of do's and don'ts. We expect you to review it and take it seriously.

When individual business units met on the last day of the retreat every senior executive made a point of asking their staff not to use the BlackBerry during the meeting. Exposed to the BlackBerry in this manner, individuals developed a generally positive public stance toward the device. Informal questions and interaction throughout the retreat revealed that a vast majority of people across internal functions reacted to the device with a sense of excitement and pleasure. Potential users told me how impressed they were with the thoughtfulness of the roll-out, the explicit language about expectations, and the overall generosity of the 'gift.' Numerous people described receiving the BlackBerry as a sign that the company was treating them "as professionals" and recognizing their "value as leaders."

The messages projected during roll-out clearly made an impression with the four attorneys who attended the retreat. This impression affected how they initially framed the device in light of their own work and identity. In an interview several months later, Tony referred to this initial presentation when sorting through his relationship with the device,

It goes back to what [CEO] and [Sr. VP HR] and others said when they first gave them to us. Were you there when they first gave them to us? [Asking me]. So you understand. And they said, you know, well, listen, we're telling you now, *we're telling you now*, we don't want this to make more work for you.

The other three attorneys were not at the retreat and were not exposed to these public messages. However, they worked closely with their legal colleagues and developed similar expectations as to why the company chose to invest in the device. For the entire legal team, carrying a BlackBerry implied that the company respected their time and leadership. It was

framed as a sign of prestige and respect; something that would enable them to engage in necessary communication in a manner that worked best for them.

The three attorneys who received the tool after the retreat had an opportunity to see how others in the legal team and their internal clients used the BlackBerry. These impressions bolstered the sense that the tool was a sign of respect. They did not expect it to be “addictive” or totally consuming. All three attorneys emphasized that they chose to work at Linden for “lifestyle reasons” or “work/life balance.” They did not believe that the BlackBerry would significantly change that goal. Asked shortly after receiving the device whether carrying a BlackBerry would affect expectations of connectivity, Ken was vehement that it would not. He asserted that, “people work really hard here, but there is definitely an expectation that you have a work/life balance.”

This quote revealed that, while attorneys initially carried a sense of the BlackBerry based on the cultural story of responsiveness and addiction, their ideas evolved as they were translated into the context of a specific organizational environment. Yes, the BlackBerry could become a “CrackBerry” according to the media, or their memory of past jobs. But this would not happen to them at Linden. All of the Linden attorneys shared a sense that they and their company were different. Numerous comments revealed that they initially assumed that the top executives did not expect them to be connected all the time. Those given a BlackBerry at the leadership retreat embraced the official stance that the tool was provided in order to increase flexibility and autonomy rather than limit these valued aspects of the job. Those who lobbied for the tool shortly after the retreat took on this perspective as part of their motive for wanting the device.

Initial framing of the device was positive. Therefore, attorneys were open minded in terms of how the tool might fit into daily practices and occupational identity. The actual job of being a lawyer at Linden bolstered this initial impression. Attorneys made sense of this mobile and text-based communication medium as enabling daily work practice and facilitating core communication acts. They saw the tool as enabling client service in a manner that respected individual autonomy and flexibility. Overall, they expected that the BlackBerry would enhance their ability to do their job.

Existing work practices and the BlackBerry

In developing their orienting frame of reference toward the BlackBerry, Linden attorneys augmented the interpretation of what the tool implied from management with a sense of how it might affect with their daily work practices. As noted in Chapter 3, the lawyers at Linden engage in communication intensive work and a vast majority of the 'product' they offer is written. Prior to getting the BlackBerry they already communicated heavily by email. Thus, Linden attorneys felt that the BlackBerry would lend itself to the textual aspects of their work and communication practices.

General comments about the relationship between carrying a BlackBerry and being a Linden attorney highlighted the text-based aspects of the job. Asked how much his wife was on her cell phone for work, Mary's husband replied "Occasionally. But, most of her legal work is written, so it's less phone conversations, more documents." Mary herself discussed how the use of the written word fits with her ideas of what it is to be a lawyer. Discussing how people tend to make grammatical short cuts when writing emails on the BlackBerry, she distinguished herself from the 'typical' user,

I wouldn't do it [*shortcuts*] to people that I don't know well. I know, like, a lot of people have the, 'please excuse spelling errors and stuff' [*tagline*]. But if I make a spelling error, I'll go back - as much as it hurts - go back and try to fix it. Because I just - I don't like misspelling - for me, it's a bad impression of a lawyer to not be diligent about that.

In a similar vein, Kathy described how writing grammatically correct emails was important to the substance of the work,

Every once in awhile I hit the wrong letter on a BlackBerry. But just like email, I tend to go back and read what I've written, to make sure I'm proofing it. Because again, especially if you're a lawyer, one word out of place, one letter out of place, sometimes has a massive difference in the meaning of what you're saying.

And later, while bemoaning the grammatical errors in messages she receives and reflecting on the fact that people don't generally seem to re-read messages sent on their BlackBerrys, Kathy qualified,

But I do think that lawyers tend to be an exception to that. Especially because of the importance of what it is we're saying. An 'and' or an 'or' could make a massive difference. It's interesting because you learn that in law school, it's almost like learning a different language. The placement of a comma could mean something different. I mean the courts have litigated this stuff. You tend to be a little more aware of how you're writing things and why.

Lawyers employ language as a tool. Therefore, several expressed that interacting through email enables them to craft communication in a manner that fits their work practice. In order to be a good lawyer one must try to communicate unambiguously rather than simply congenially. Although the comments above about grammar and emails written on the BlackBerry were given after attorneys had been using the BlackBerry, they illustrate the relationship between text-based communication and legal work practices. The initial technological frame of reference developed by Linden attorneys prior to receiving the Blackberry reflected this sense. Linden attorneys developed an assumption that the tool would enhance this aspect of their daily work practices by enabling individuals to have more flexibility to engage in core work practices when and where it worked for them.

Beyond the capacity of the BlackBerry as a tool facilitating text-based communication, Linden attorneys sensed an alignment between BlackBerry communication and a variety of daily work practices. They felt that the tool would help them keep each other updated with group projects while enabling them to stay in better touch with a variety of internal 'clients.'⁵⁴ Linden attorneys work with different internal clients. Usually these people are the heads of business units or the senior officers in the company. Projects are directed to individual attorneys via a variety of mechanisms, including the General Counsel, the nature of the legal issue, or because a client had developed a relationship with a particular attorney and contacted them directly. Occasionally, multiple lawyers will take on a major project, either because an

⁵⁴ Prior to using the BlackBerry they embraced email for these same reasons. The shared sense was that the BlackBerry enabled them to continue current email patterns in a manner more convenient for the individual attorney.

issue is large and complex or because expertise in different aspects of the law is required. Although communication with colleagues overseas is common, these lawyers themselves don't regularly travel.⁵⁵

Devin gave a thorough description of the type and variety of legal work involved for this type of position:

We're a public company so we are involved with all that entails; the board work, the governance thing, tax and everything else you would know about. There are employment issues and all kinds of contracts that any company will have such as IT, other equipment uses, the lease for this building and any other building, etc. These are sort of typical things that no matter where you work you're going to have to deal with. And then the, you know, at Linden, our equity, our big equity is in our brand so we have a huge trademark protection program, trademark registration and protection program . . . And then there is reviewing the marketing materials, all the press releases coming from building from a trademark standpoint. So it's a huge variety of stuff.

Kathy also emphasized the diversity of work entailed in the job as well as the cooperation and flexibility necessary to tackle large issues,

I work incredibly cross-functionally in the company. We all do. There are times where Tony will be working on all the SEC stuff. That's what I used to do [*at past corporate law job*], the public company work, so he will pull in myself or Ken to help him on the proxy, the 10K, certain tables. "Can you do this? Can you do that?" And on bigger projects where we're all involved, I'll work jointly with Ken or with Mary . . . for a lot of the restructuring stuff where we're moving headcount, we're moving people physically. That's when I'm managing the corporate side and Monica and/or James are managing the employment side.

Linden lawyers described a shared impression of the BlackBerry as a tool that would enable them to better perform the variety of tasks involved in their job. Although the work is diverse, communication is a core aspect of being an attorney. Further, lawyers assumed that expanded

⁵⁵ A Linden attorney may not travel at all for several years. However, a specific issue with real estate, an acquisition, or a particularly difficult labor issue might inspire an attorney to travel. At the maximum a lawyer may make one or two trips a year.

access s to email would enable key communication acts. In general, Linden attorneys communicate with three general parties: each other, internal 'clients' and external legal counsel. Each of these communication partners also carried a BlackBerry and directed much of their interaction via email prior to receiving the device.

For these attorneys, communication acts (conducted via email) generally involved maintaining visibility into what each individual was up to, directing external counsel, and appearing responsive and knowledgeable to internal clients. As such, the lawyers initially framed the BlackBerry as a device that would help them deal with the high volume of communication and monitor for potential blow-ups. They felt they could interact with international colleagues in a manner that upheld their deeply held values of client service across time zones in a manner that was easier for the Linden attorney. Attorneys described 'easier' in a manner that implied that the BlackBerry would increase flexibility and individual control over communication acts. An attorney would no longer have to stay home in the evenings to monitor email if a potential issue was brewing in a different country. They could keep a 'heads up' on what was going on in order to know if they needed to turn on their laptop to engage in more intensive work. The asynchronicity of the communication act would work for short messages and enable coordination and shared updating among the team. And the relative ease of use would allow users to monitor email during off hours.

Along these lines, James described shortly after receiving the BlackBerry how he developed a communication protocol that utilized what he understood to be the distinctly useful features of his BlackBerry and laptop.

It [checking the BlackBerry] becomes kind of a check-in, status, to prompt either phone calls or messages. But if it is intensive, it becomes, "Ok, I need to fire up my laptop because I need to access documents, I need to make revisions." So, that is how I use the tool [BlackBerry]. It is kind of baseline level communication. Because . . . if I need to do something in depth, it gets tough -- to capture the preceding message if there is a trail of emails, and certainly if there is an attachment. Almost like triage. The BlackBerry helps me decide when to turn on the computer.

Specifically, this understood ability to easily monitor messages was seen as a benefit for these users because they are tasked with coordinating and directing external counsel in Europe and

Asia. Several touted the ability for a Linden lawyer to answer a question in the evening because this enabled work to go on in other countries without losing entire days due to international communication challenges.

Because this legal team is co-located with many of their internal clients and they do not regularly travel; many of the core tasks associated with their jobs (red-lining documents, writing detailed emails, encouraging face-to-face counsel, etc.) are accomplished in the office. Therefore, the BlackBerry quickly became a tool to stay connected and monitor email outside of normal working hours. As such, Linden attorneys felt that the BlackBerry enabled them to maintain the role of a responsive and professional employee. This focus on 'client service' is a key aspect of being a lawyer, both in terms of getting the job done and embracing the occupational identity of 'lawyer.' The following section outlines how the occupational identity of these BlackBerry users resonated with their impression of the device. Maintaining responsiveness while protecting personal time and space were shared values among the team. Linden's legal team initially framed the BlackBerry as a device that would enhance their ability to have both autonomy and commitment. They did not initially anticipate how difficult it might be to maintain this balance over time.

Occupational identity and the BlackBerry

Linden attorneys developed an initial technological frame of reference based on their impressions of how the device was rolled out and how it might align with their daily work practices. In other words, each lawyer made sense of the tool in terms of how he or she made sense of his or herself. Occupational identity colors how people see themselves and their role within an organization. Occupational identity operates in continuous interplay with work practices. This relationship between identity and practice informs how people initially orient themselves toward the BlackBerry and experience it over time. The legal team is unlike many other internal functions at Linden because they are members of a codified and prestigious occupational group. The salience of this occupational identity was visible when people described why it felt inappropriate for only half of the team to be given BlackBerrys at the

leadership retreat. In describing the process of asking for the device after the retreat, one attorney -- who did not initially receive a BlackBerry -- clearly saw a connection between their position in broader society and their treatment within the company,

So we had multiple conversations with *[General Counsel]* to say, "We understand the company's policy from a management perspective, from a cost perspective, from a policy perspective. But there are certain exceptions which we think make sense." When we do the kind of work we do; when we're doing the kind of transaction work that's going on. And the senior team is emailing not just *[VP]* level, they're also emailing the next level down.

I think there's a perception in the company that if you're a lawyer with the company you're of a certain level, you have the equivalent of a PhD, you know. You have three years of additional schooling. You have that responsibility or -- you have that responsibility with respect to the work. Therefore people expect -- they just didn't even think that you wouldn't have a BlackBerry. They were surprised when you say, "Sorry, I don't have one."

This impression that occupational identity conferred a status that is not reflected by pay grade was repeated by a lawyer who received a BlackBerry at the leadership retreat. This attorney described how the other three correlated having a BlackBerry with their job and status.

I think they made their case *[for the BlackBerry]* eventually for a variety of reasons. I think eventually they all got promotions too, to a director level, because of their professional status. Professional advanced degree or what have you. Before that, I think it was like, okay, we're attorneys too, we're doing a lot of important work. It was like, so, you need to have that tool, and we don't? If anything I think the BlackBerry, in that particular instance, really accentuated for them that somehow they weren't getting -- like, there were people in director level who they viewed as -- I don't know if the words came out of their mouths, but -- the way I understood it at the time, and once they kind of let their feelings be known at the time, was that there are a lot of people in director level out there who they could clearly make a case that the type of work and the things that they were doing were as important, if not more important, than what those people were doing. And yet, they were not getting that tool.

These quotes suggest that the BlackBerry roll-out was a symbolic episode that surfaced deeply held ideas of what it meant to be a lawyer, of professional status, and of the importance of legal work. Regardless of whether or not these lawyers needed the device to communicate

successfully, the distinction between 'haves' and 'have-nots' was experienced by those who did not get a BlackBerry as damaging to their occupational image and identity.

One attorney described,

There's just a lot of stuff that's going on. I think that we were working with people that had BlackBerrys and we didn't have them, so it was kind of hard to react to them, because we didn't have the same level of responsiveness. And when you're sitting in a conference room and you're waiting for information and you need to get it email-related and you can't get to it, it's frustrating.

Specifically,

Someone turned to me and said, "Didn't you see that email that so-and-so sent at 1:15?" and I'm like, "I don't have a BlackBerry." . . . I forget what we were doing. I was in a conference room in New York, and I'm like, "I didn't see it, 'cause I have no access to my email," and they're like, "Oh, really?"

It [*the email message*] was important. It was important. Like, other people at the table had it, and it would've been good if I had had it too. But they just assumed that I had it, and I think the, you know, it would have been good to have it. So yeah, I think that that – those situations are rare, though, incredibly rare. Very, very rare. But, I think it just kind of punctuated the point that we were dealing with a level of people that all had them, and we didn't, and in – and people were expecting that you had that information.

This quote is revealing on several levels. First, the implication is that core work practices were being conducted through email. Messages were coming through that required an immediate reaction. Second, the salient moment of not having access to information was in a public setting where others with BlackBerrys become aware that their colleague didn't have the device. Hierarchy and status became visible and the occupational identity of 'prestigious lawyer' was publically threatened. And third, even if this situation was considered "very very rare" it is deemed sufficient by the individual to warrant asking to modify company policy and get the tool. This attorney admitted that because others had access to the email in question, the fact that he/she did not have a BlackBerry did not actually affect the situation. Responding to a question of whether there was a psychological effect of not having the tool the answer was affirmative, though wavering,

Yeah. I was expected to know something that I couldn't know, but – and it wasn't anything that any – you know, it was just like an oversight. It's just an assumption that I had the same access.

It is easier for the lawyers to discuss the need for a technology in terms of values embraced by an occupational identity than due to perceived personal slight. Every Linden attorney called upon the term 'client service' to describe their role as a 'lawyer.' According to these users, a touchstone of their job is projecting the image that every client is their number one priority. Devin reflected on his impression of the best lawyers to work with and translates this assessment to how he performed his job at Linden,

You know, with external counsel, I find myself thinking, "I'm the most important client." And, I want them to treat me as if I am. I realize that I'm not the only one they're dealing with, though I would prefer to be. And really the best lawyers do that, they treat you as if you're their favorite, most important, whatever -- even though, you're probably way down on the list.

Similarly, Mary asked herself, "What do I value the most in outside clients? Because it's the same relationship, I'm their client. And I value responsiveness and meeting deadlines."

Individual descriptions of why the BlackBerry became seen as a necessary tool to perform the job of Linden attorney incorporated the professed need to be accessible and the image of accessibility as a cornerstone of good client service. According to one of the three attorneys who asked for a BlackBerry after the retreat, "We all had different experiences for why we needed them, but it was all along the same lines. It was really just a client service issue."

The fact that all of the Linden attorneys held up client service as a core aspect of their occupational identity was apparent in their animation and eloquence in describing the role of service in their job. The attorney who struggled to describe why it was such an issue to be out of the loop in the conference room in New York was able to clearly articulate how having a BlackBerry would enable better performance:

I think it's a great tool to provide good client service. This is a service job. You want to be as responsive as you possibly can so that people will come to you with their issues, so you can be more proactive than reactive, and people know that you'll get back to them. They'll be more inclined to share with you, and you can usually head a lot of problems

off at the pass if people get you involved early. So, I think that's one of the reasons we wanted it, too. Because if people see we're responsive, it starts a good dialog.

In comparing working for a corporate law firm and working in-house, James pointed to client service as bridging the two roles.

It's the same thing. I mean, you're still serving a client. And I can see the process, from our vantage point. But really, all you can say is, "My experience is that, I've got thoughts on how to make these decisions and where I think you should be." At the end of the day, I'm just advising. . . You know, you can say, "Here's what, if I were you, what to do." And that's part of our frustration. We're not always guiding the bus. A lot of times, there's deference, but sometimes they completely ignore us. So, yeah, I mean, it's the same as private practice. Just the style that you're doing it is different. You're limited to what information you get from the client. You tend to have, generally, better information, to give them. But, very similar. We're serving a client. As I said, early on, I think it's staffing. The department, the model of the department, borrowing from the BASF, "We don't make the briefs. We make the people who make the brief better."⁵⁶ [laughter] So, I mean, ultimately, we serve them.

While a lawyer is in a service role, it is a highly prestigious form of service. Clients expect that the attorney has expert knowledge that will help the client operate in a broader legal environment. In essence, lawyers are not strictly servants but 'councilors.' These people provide a niche service that requires specific knowledge and education. Furthermore, Linden attorneys saw themselves as having high status employment opportunities outside of the company. Each member of the legal team described choosing to work as in-house counsel for family and 'lifestyle' reasons. They each gave up jobs in corporate law firms where they made more money but reportedly enjoyed less autonomy, flexibility, and ability to work manageable hours.⁵⁷

⁵⁶ Reference to the chemical company, BASF, tagline "We don't make a lot of the products you buy. We make a lot of the products you buy better."

⁵⁷ Five of the seven attorneys had worked for a respected corporate law firm within the last 10 years. The other two had prior experience in corporate law firms but had come to Linden from a different job in-house. Each attorney was eager to discuss past employment and several appeared to want to defend their decision to go 'in-house' as if it was considered a less esteemed career path for the corporate attorney.

According to Kathy,

At [*Large East Coast law firm*] my hours were way longer. I used to leave the house at 6:00. If I got home by 10:00, it was an early night. I was sleeping on the partner's couch. I was buying clothes at Ann Taylor the next morning. I was showering at the firm. So coming to Linden is a very different lifestyle choice. And that's part of it. It also came with a huge pay cut. But that was part of what was offered. It's still going to be an intense job. You're still going to have a lot of responsibility. Yes, it's a global company. There's a lot going on. But it shouldn't be what the big firms are.

Ken had a similar perspective,

My work here is a lot different than it was with [*a different large East Coast law firm*]. I was a deal lawyer, so it was like when you're on a deal, it's just like you just go and go and go. I did a lot of securities work, so, I had to be constantly available. People just expected it, and I don't think people expect it as much here. The things that I have worked on here that have been very time sensitive, you're just providing better service to your client if you can be available when they need you, you know. But I definitely don't think it's the same as the firm. I mean, that's why people – that's one of the reasons why I think attorneys make a change in-house. It is a quality-of-life issue, among other things, but different work/life balances, I mean, so – we're busy, super busy here, but it's different.

These lawyers made an employment decision that might be construed as threatening to their occupational identity. They gave up the prestige of working at a large law firms in major cities to move in-house to a corporate headquarters that is not close to a major metropolis. They left large salaries and the concomitant pressures that went along with them. Therefore, they employed strategies to rationalize and make sense of this decision in light of a valued occupational identity. The previously mentioned emphasis on 'client service' is one technique for asserting the consistency in identity across legal roles. They also take on a tone of educator, emphasizing that, their 'lifestyle' choice may be less cushy than a corporate lawyer might imagine. These quotes highlight a tension between wanting a job that supports a certain lifestyle and wanting to maintain a traditional occupational identity that implied a very different lifestyle.

For example, shortly after discussing how different her life was from working at a large law firm Kathy re-asserted that the overarching role of 'lawyer' implied commitment and long hours,

The hours are longer here than I think a lot of people would expect. It's definitely not a 9:00 to 5:00 job. And there was never the expectation that it would be a 9:00 to 5:00 job. That's just not – we're lawyers. We work for a global company. Stuff's going on 24/7. Period. Especially because of time zone issues. And I'm much more aware of that working for a global company.

Similarly, Tony directly addressed his conception of a prototype "firm lawyer" and what he believed this stereotypical figure might assume about his job as in-house counsel,

That's the thing. I mean, some, law firm lawyers, maybe a lot of law firm lawyers think, I don't know, I'm not interviewing them, I don't know their perception of in-house counsel. But they 'otta know, it's not the in-house counsel of 15-20 years ago because you're right, people do work their asses off. It's very common for me to work 10, 12 hour days.

These lawyers appeared to experience ongoing identity tension. They were both lawyers and individuals who said they made decisions based on family and lifestyle choices.⁵⁸ Because they identified as lawyers separate from their employment at Linden, they needed to maintain a sense that their job in-house fulfilled the core values of 'lawyer.' And since they described actively choosing to leave jobs in line with that prototypical occupational identity, they needed to assert to themselves and others (the researcher, me, asking about their job) that they made that decision for the 'right' reasons – i.e., to have a better lifestyle, more time to ski, interactions with family, etc. BlackBerrys became an element in this identity negotiation. For those who were not initially given the device, it became a contested symbol of their desire to enact the role of 'professional attorney.' Once the entire team had BlackBerrys, each lawyer framed the tool as enabling 'client service and responsiveness' while emphasizing the purported flexibility and freedom the tool provided.

⁵⁸ Of the six lawyers below the VP General Counsel, all had young children. Further, two of the lawyers maintained a job-share that explicitly allowed them more time with their children.

The shared background, codified occupational identity, and similar lifestyle choice led Linden attorneys to develop symbiotic work styles and overlapping identities. Kathy described this dynamic,

Most of us came from big firms. You know? *[description of where everyone worked prior]*. So, we all came from that environment, which is part of why we're a good conducive team and why we're very committed to our work and our responsiveness to clients and that's the way – we work as a big firm lawyer for in-house.

Soon after she repeated herself,

I think we tend to fall into patterns together. Again, I think we tended to come from a lot of the same kinds of backgrounds so we tend to work a lot in the same way. Which is being responsive to clients.

Not surprisingly, these individuals developed converging initial technological frames of reference. Just weeks after receiving the device Tony gives a concrete description of how he saw the BlackBerry as enabling his ability to be a lawyer and enjoy personal time.

Because of the fact that I'm not plugging into the laptop every single night. It's like, "Oh, I want to be the consummate professional, I want to be available online and responding until 9:30, 9:00 at night. And just to show my dedication, I'm going to be there every night. If somebody needs me, I'm going to respond." And I can guarantee thus far that my career, it's probably been less than 1% or 2% of the time, where if I had done that [responded late at night] I really would have shown that person, wow, he's going above and beyond. So, for the 1 or 2% bang for the buck, I wasn't getting it. But to the extent that that 1 or 2% will someday actually mean something, this *[the BlackBerry]* kind of comes in handy. It's like, oh, OK, wow, a quick and easy tool that allows me to plug in, without a lot of stress. I don't have to take too much time from the family, I don't have to log into this damned thing, make a production out of it. . . And then if there's actually something that's really critical, like last night, OK, great.

Linden attorneys made sense of the BlackBerry as a 'gift' that was aligned with their sense of their job and their sense of self. They embraced the explicit framing of the device by senior management and assumed that carrying a BlackBerry was a choice. As such, the tool implied respect for their position as organizational leaders and professionals. Because the work is often text-based and subject to changing information across the globe, attorneys also developed a sense that carrying a BlackBerry would benefit their work. Finally, their occupational identity responded to the symbolic and functional attributes they understood the device to represent.

Lawyers framed their BlackBerrys as enabling them to enact the role of committed, client-service-oriented councilors.

This small, co-located legal team had numerous opportunities to communicate these assumptions about the BlackBerry to each other and to develop a shared understanding of how others felt about the device. Consequently, they created highly aligned technological frames of reference that were initially very positive. These frames oriented how they initially made sense of the device and began to use it in practice. The next section of this chapter explores the evolving norms and experience of use that emerged as the BlackBerry lost its aura of novelty and became part of their taken-for-granted communication repertoire.

Experiencing BlackBerrys over time: In-house legal counsel

The legal team at Linden initially shared a convergent and positive orienting frame toward their BlackBerrys. See Table 2 for a breakdown of initial frames among individuals in the legal team. These attorneys embraced a strong professional identity that encourages availability and responsiveness. Therefore, they welcomed a tool they felt would enhance their ability to provide client service in a manner they assumed would also allow individual freedom and flexibility. They were accustomed to performing core communication acts through email and thought that, given the international client base, the BlackBerry would streamline necessary 'off hours' communication. Secure in the culture of the firm and the collegiality of their group, they did not fear that the potential for access would turn into an increase of overt control. They saw the device as a gift and a benefit. Nevertheless, over time Linden attorneys discovered that carrying a BlackBerry was more challenging than expected.

The very factors that encouraged lawyers to initially welcome the device lead to difficulty in daily experience over a longer time frame. Co-located in the corporate office, the lawyers explicitly relegated their BlackBerrys to 'off hours' communication. The fact that they carried a tool explicitly for 'off hours' communication soon served to increase the amount of such communication.⁵⁹ Individually held values of client service became difficult to satisfy as shared expectations of availability shifted and perceptions of client demands during 'off hours' increased. Because multiple lawyers often work on the same project, 'off hours' communication was visible throughout the team and contributed to intensifying expectations of expanded availability and rapid response to email messages.

Once patterns began to shift, the collegial environment and integrated work practices of the team made it difficult for individuals to maintain the freedom they initially expected the BlackBerry to provide. In a relatively prestigious and non-hierarchical environment, individual attorneys struggled to limit expectations and carve boundaries limiting access. And even after the attorneys attempted to explicitly discuss the difficult experience of carrying a BlackBerry, people continued to say that the tool reduced free time and increased stress. After three years of use, Linden lawyers struggled with the potential for access in a client intensive and collegial environment. Appendix 7 traces this history via the experience of one Linden attorney.

Occupational identity, work practices, and BlackBerry use

After receiving the device Linden attorneys quickly developed a shared norm about when and where it was appropriate to use the device. It was considered rude by all to use the device in the office during meetings or in public spaces. Therefore, BlackBerrys became a tool for enabling communication outside of business hours. After two years of use Devin described the

⁵⁹ This statement is based on their impression of increasing 'off hours' communication.

general pattern of BlackBerry use for Linden attorneys. This description was confirmed in interviews with each attorney and by my own field observations.⁶⁰

The pattern for almost everybody is that we don't use the BlackBerry when we are in the building... If I'm out of the office, I'm using my BlackBerry, even if it is a work day, I'm looking at my BlackBerry. Most of us check it when we get up in the morning, and before we go to bed at night. So, there's evening BlackBerry times during the week.

James' description from one year earlier revealed that this pattern of connectivity had been the standard among Linden attorneys for some time. James wrote in an email that he uses his BlackBerry,

Essentially every day. Usually check it first thing in the am to see if anything has come in overnight - though will often wait on responding until later in am. Usually wear it during day - but seldom use it to respond if in the office. Generally take it off when I get home (6-ish) but check once or twice during night. Usually don't wear it during weekend - but do check it a couple times a day.⁶¹

Attorneys rarely used their BlackBerrys in front of each other or while interacting face to face with potential clients – i.e. any other Linden employee. Yet, they continued to carry the device on their person. Numerous observations revealed that the female attorneys often carried their BlackBerry to lunch and the male attorneys wore it clipped on their belt throughout their day at the office. Their standard dress of tan pants and a tucked in button-down shirt emphasized the device. During an interview shortly after the email referred to above James seemed to discover the discrepancy between how he used the device and how he chose to display it. Asked to review his morning with the BlackBerry James said,

⁶⁰ While Linden attorneys regularly carried their BlackBerry with them to lunch or walking through the corridors I was focused on observing usage patterns and did not see one instance of anyone using the device in common areas of the headquarters.

⁶¹ Phase II data confirms this description. During the days analyzed attorneys checked their BlackBerrys between 2-5 times an evening and 3-12 times on a weekend day. BlackBerry messages sent and received during work hours occurred when an attorney left work early for personal reasons - doctor's appointment or baseball game.

I'm up and out. I get coffee here *[in the office]*. So, it's literally, helping kids with cereal, put my wallet and keys in my pocket, grab my BlackBerry. I put it on my belt loop, don't put it in my bag, I wear it on my body. It's funny, I was thinking of this in advance of our meeting, why do I bring it here *[to the office]*? I don't really need it here, but I bring it here.

Pressed to come up with a reason why he brings the BlackBerry to work James hesitated,

Um, sometimes the phone. Um, *[long pause]* why? Sometimes out of habit, but I don't know what the habit would be. Habit of bringing it to work? Habit of when I do travel with it I have it? It's so easy on the belt, it's easy enough I don't really notice it on the belt. I wouldn't look at it all day, unless you were here *[interviewer asking about the device]*. I rarely look at it. God, when would I ever bring it? If I need my schedule maybe? I'm going to a meeting where I know they're going to need to schedule a meeting I'll bring it. But most of the time, 95% of meetings I don't take it.

While not deliberate, this display of the BlackBerry revealed the extent to which James identified with the device. Even if he doesn't actually *use* it at work he *displays* it. James is not alone in this discrepancy. Although I never saw attorneys glancing at their BlackBerrys during lunch, or while walking through the corridors, the existence of the attorneys' BlackBerrys was obvious to the casual observer. On the belt or carried on a stack of papers, the attorneys would wield their BlackBerrys at work without actually using them. Displaying the tool highlighted the symbolic relationship between tool and user. Building on the initial alignment between occupational identity, work practices and roll-out, the BlackBerry continued to symbolize a dedication to client service and identity as a dedicated professional.

In a related discussion, Mary reflected on her relationship with the BlackBerry. Even though the capacity for constant communication was similar between her BlackBerry and cell phone, she experienced the two as vastly different tools. After about a year and a half with the BlackBerry, Mary described how even before having a BlackBerry she would rarely use her cell phone; leaving it in her car for weeks and often forgetting whether or not it was charged. In contrast, she found herself very attentive to the BlackBerry. In her words, "This was the first piece of technology that I really do live with every day." Asked about the difference between the two wireless communication technologies Mary said, "I guess because, for me, the cell phone's never been connected to work; it's always been connected to home and usually I have some idea of what's going on and what I might get called for at home."

Mary felt that, in contrast to home, work was unpredictable. Therefore, she internalized a sense that she needed to be available to what became her primary conduit to work communication, email on the BlackBerry. Prior to receiving the device Mary checked email once or twice from her desktop computer at home. Since using a BlackBerry she described checking email much more regularly (every 15 to 30 minutes).

Asked to describe her motives, Mary immediately referred to the ease of using the BlackBerry. She also hinted at a desire to keep up with shifting expectations. Mary's communication partners are spread across the globe. Seeing herself as a responsive service professional, Mary took on a commitment to check her BlackBerry. After a year and a half of use she learned to "live with" the device in a manner different from other communication technologies. A year later she was much less positive about this reality.

Linden attorneys tend to work with the most senior people in the company. Senior people have a reputation of working non-stop and, as their 'councilors,' the lawyers expect themselves to be available to these senior colleagues. As Kathy described,

And, again, it's the people typically who have BlackBerrys who tend to be the higher level people and who tend to work longer hours and work sort of constantly, through weekends when needed and that sort of thing. So I don't get sort of the lower level administrative things on my BlackBerry. Internal to the company I tend to get stuff from people [*sr. level in internal hierarchy*] and above.

Asked if the level of person sending a message affected how quickly she felt she needed to respond, Mary explained,

It depends. If I'm getting up into the sort of the VP, CFO, COO, CFO level, absolutely. If I'm into the level eights and the level nines, people who I consider my peers and who I work with on a regular basis, again depending on who it is and the content of the message, a lot of times they're not expecting me to respond right away.

Linden attorneys were also coordinating work across the globe. They are the point people for international issues and parcel out work to outside international legal counsel. This requires regular coordination between distant time zones. Asked to account for much of the 'off hours' emailing James specified,

Most of the traffic that comes through is, you know, somebody might be in Europe, or Asia, at the end of their day or beginning of their day. Maybe on Monday, which is our Sunday, and they're sending things in the course of business. Or, it could be somebody stateside who's just like, you know what, I've got a couple of hours on Sat, I want to clear things up, get things off my desk. I may 'cc you or send you a message, not expecting [a response].

Devin described a similar scenario,

I think that BlackBerrys come in as most helpful for us because we have such big international business and because of time zones. We do ~~so~~ much by email. Late at night and early in the morning are critical. I mean, one of the reasons I have to look at my BlackBerry when I get up in the morning is that if I'm looking at my BB at 5:30 in the morning it's already almost noon in Europe. And if something's come up, you know, if I wait until I get in the office to start even thinking about what their issue is, I've already lost some time.⁶²

Reviewing recent email patterns during a Phase II interview Kathy related a concrete example of how international coordination led to expanded time engaged with work emails.

According to Kathy,

Last night I sent an email to Taiwanese counsel, I needed some stuff translated, it was urgent. And I said, I will check email until 10:00pm, please, if at all possible, get back to me before that.

Asked if the message came in as requested Kathy continued,

No. I checked it at 10:00pm. I was literally in bed trying to stay awake until 10:00. I checked this stupid thing [BlackBerry] constantly. I set it next to me on the bedside table, which I *never* have it upstairs. It's just, I knew I was trying to get something from them by 10:00 and I needed them to give me a quote on timing and money. They didn't, so I got up this morning, after my shower I took a look at it, they had responded around 11:30 last night and they needed a response from me by 2:00pm their time which is 2:00am my time. I was like, "forget it, it just didn't happen."

⁶² In actuality, only a small percentage of 'off hours' BlackBerry use involved international communication. During Phase II interviews I gathered email data for 12 week days and 11 weekend days of BlackBerry use by Linden attorneys. Of the 183 'off hour' BlackBerry messages exchanged during these days only 8% of messages involved an international interlocutor (individual attorneys ranged from 0 to 36%).

Kathy was animated when she described this scenario. While she decided to draw the line regarding her responsiveness and availability, her demeanor expressed frustration and an air of helplessness. Kathy did not want to be unavailable and she seemed to be reminding herself that the expectation to turn something around between 11:30 p.m. and 2:00 a.m. was unreasonable. Kathy identified as a consummate lawyer. Numerous comments reveal that she prided herself on providing good client service and expected that availability and responsiveness were integral to doing her job. This interview took place after Kathy had been using the BlackBerry for approximately a year. It is obvious that the initial sense that the device would enable better client service has started to evolve into an understanding that better client service can be a double edged sword. While she may be providing better client service, the expectation of availability is challenging her sense of personal time.

Spouses also saw the effect of carrying a BlackBerry on the relationship between work and home. In discussing the ability to have three kids and two professional parents the wife of one attorney said,

Obviously, there's times when the BlackBerry is, you know, it's like, okay, personal life stops and we take a couple minutes, because work is here [*on the BlackBerry*], and that's just always been my expectation and certainly his expectation of kind of how work works.

The husband of another Linden attorney similarly discussed how having the BlackBerry enabled his wife to be a lawyer in a manner that worked for the family. Asked whether the BlackBerry affected her job and stress he replied, "It has a huge effect and makes it much easier. Because she doesn't have to be at the office to do her job as well as she does." Pressed to describe life before the BlackBerry he emphasized the benefit for others in the room when his wife was emailing rather than talking on the phone, "She'd be on the cell phone, and now it's much better because of the BlackBerry, 'cause I don't have to be subject to verbal conversations to be on top of her game. That's the beauty for me."

Linden attorneys were relatively immobile office workers, they communicated globally, and advocated an ideal of instant client service. For this group the BlackBerry became a device used to enable 'off hours' communication. Each user made individual choices regarding when and

where they were going to incorporate BlackBerry communication into their own daily practices. Still, numerous social and structural elements encouraged individual attorneys to use the tool in a manner that increased 'off-hours' connectivity. This behavior was visible throughout the team and within months each lawyer was using his or her BlackBerry to maintain a presence in what they considered necessary 'off hours' emailing. Individual acts evolve into shared expectations. Once lawyers assumed that others were available for 'necessary' emails, it became easy to 'ping' colleagues in the evenings with questions and comments that were not time pressing.⁶³

As individuals integrate the capacity for constant email connection over time, they make numerous micro choices about when and where to connect to email. Technological frames of reference, characteristics of the job, and occupational identity inform these choices. Social dynamics also influence individual acts. Such pressures emerge through the interplay of individual, but shared, assumptions. Therefore, they evolve as individuals shift their expectations of connectivity. Shared assumptions are susceptible to change as individuals expand or change communication practices via a new technology.

Individual patterns of BlackBerry use

Although Linden attorneys shared significant overlap in professional identity, work structure and daily work practices, individual attorneys varied their specific attempts to integrate their BlackBerry into daily life. Some enjoyed the potential for constant connectivity. These users reported carrying the tool with them throughout their evenings and weekends and checking it every ten to fifteen minutes. Some developed routines that enabled them to connect to email

⁶³ According to Phase II data 29% of all 'off hour' messages (N =183) were solely among members of the internal legal team (individual attorneys ranged from 4% to 49%). None of the messages among the legal team were described as urgent. This number reflects the fact that Linden attorneys are not using their BlackBerrys simply interact with clients and further perceptions of excellent client service.

through the BlackBerry during their 'off hours' while limiting their awareness of incoming messages.

These users would purposely create boundaries for themselves; not bringing the BlackBerry into the bedroom or taking it out to dinner with the family. And some tried to stay connected only when they felt it was absolutely necessary. These attorneys kept the tool in a specific place in the house and made a conscious choice to check the device when they felt that something was brewing at work.⁶⁴ Bridging these distinct styles was a team oriented mentality. Therefore, even while individuals may have had different views on how they hoped to integrate email communication into their 'off hours,' they were motivated to align their communication patterns with those of their close colleagues.

Devin existed at one end of the spectrum of BlackBerry integration. About a year after receiving the device he felt that the ability to "keep up" far surpassed any inconvenience suffered from email interruption,

I think people [*Linden attorneys*] have to decide what they're comfortable with. I think people have different families. They're at a different point with their families and in their lives. And, for me, keeping up to date with email is more important than being interrupted. For me, that's what I love about BlackBerry, absolutely love it, because I can keep up.

In contrast to Devin, Kathy described how she actively sets boundaries when taking the BlackBerry on vacation. After a year of use she said,

I don't want to even just zip it off [*a message on the BlackBerry*], I don't want to set that as precedent. I don't want people to expect that when I'm on vacation with my husband, and it's supposed to be my down time, that I'm gonna be responding. Now, do the other lawyers know that, yeah, I probably am checking it at least once a day? Yeah. Do they know that they will get an answer from me? Yeah. But to just sort of regular communication, you've gotta bounce back with, "You know I'm out of the office and I

⁶⁴ Each of these styles was described as current usage patterns after the attorney had carried a BlackBerry between one and two years.

don't want to make a habit of ..." Sometimes I type a response and save it as a draft. Then I send a bunch of drafts out when I come back in the office.

At the other end of the spectrum was Tony. After two years, Tony was still actively attempting not to use the BlackBerry in a manner that he felt infringed on his personal time. Asked why he chose to turn his device off during nights that he didn't think anything will come up,⁶⁵ Tony was adamant,

You've got to carve out time yourself. And I think there's permission there [to turn it off]... We play this role, it's called trying to be a professional, don't want to be a wimp, da, da, da, da, da. But you've to get away from that and just take time. I'm gonna take it to a next step which, you know, I don't really care what [CEO and other Sr. Officers] would say 'cause, it's my time, it's my time. It's my time, dammit, and this is about setting limits and barriers.

Although these quotes reflect different perspectives on the role of the BlackBerry in daily life, they reveal underlying similarities in the relationship each attorney developed with colleagues via the BlackBerry. Each emphasized individual choice in how they decided to use the device. Devin was explicitly aware that others may not have the same relationship to incoming emails. Kathy's explicitly told people she was not available. And Tony's adamant claim that he would not let his personal time be co-opted by incoming emails was bolstered by his sense that he enjoyed a "permission" to disconnect.

Concomitant with this sense of autonomy was an implicit understanding that interacting with email through the BlackBerry is a social act. Each of the BlackBerry styles described in the previous quotes implied that emailing is inherently social. In asserting that he loved the ability to "keep up" with email, Devin implied awareness that he is being interrupted by the needs and demands of other people. Kathy may be drawing boundaries, but her desire to actually communicate that she was out of the office and stay in touch with other lawyers revealed an

⁶⁵ Pressed to quantify how many nights a week he turns the device off, Tony admitted it was mostly on weekends and potentially one, occasionally two, week nights.

underlying desire to satisfy or manage social relationships. And the fact that Tony was practically vitriolic about protecting his time highlighted the sensitive and difficult negotiation of opening up the access to oneself. Tony emphasized the social “permission” to disconnect while making the assertion that he didn’t care about the potential expectations of senior colleagues. This duality revealed his ambivalence and sense that enacting the role of “professional” entailed leaving oneself open to ‘off hours’ communication.

Asked about the effect of having a BlackBerry during busy periods about a year into using the device, Kathy’s thought process reflected a similar assumption that availability and responsiveness were necessary components of her job,

I think having the BlackBerry definitely helps. Especially because even if something’s blowing up you can say, “I’ve gotten your message. I understand the issues. I’m on it and I’ll be back to you by this time,” which I think – especially when another attorney is in contact. It puts their mind at ease that, “Okay, yeah. Acknowledged. Got your message. Understand what you need. Okay.” I mean, I think with a lot of people, if they know that you’ve at least acknowledged what’s come in and that you’ve gotten it and you understand and you’re gonna get back to them, they’re fine.

Unlike Tony, Kathy did not yet see the BlackBerry as a leash tying her to work. She did not describe her choice to respond to incoming emails on the BlackBerry as required. Rather, she framed her actions as facilitating interpersonal relations and putting others’ minds at ease. She did not resist bringing the BlackBerry into non-work contexts. Her husband Bob noticed this dynamic,

It’s one of those things that she would probably, if it were her computer at work, not check it as often. But since it’s [*BlackBerry*] so easy to use, she has a tendency to look at it a little bit more often, in a casual environment. In her work environment, I think it works great for her, she uses it and loves it, and that’s pretty unseen to me.

Asked to elaborate on what he thinks of as a “casual environment” Bob hesitated, “More like I – in my opinion, she – it’s like the weekend or she should be taking a little time off, but she will check it, [*BlackBerry*]. So, she’s attentive to it as in that context.” Kathy was not yet attempting to limit BlackBerry communication during off hours. A year into using the tool she continued to embrace a device that enabled her to maintain connection asynchronously. However, the number of qualifiers in the following quote revealed that Kathy had begun to see

where the potential for connectivity could have negative ramifications on her free time and personal life.

I'd rather, frankly, get an email. Because, again, the person sending it can send it on their own time, you can read it on your own time and you can choose whether or not to respond on your own time. It is the same for me on the weekends. Typically it's a good thing. Typically it's a facilitative tool. Typically it's nice to know that there isn't anything blowing up. The problem is when something is blowing up.

Linden attorneys did not want to become 'CrackBerry addicts' who were constantly tied to the device. Yet, they began to realize that boundaries were not stable and the desire to be available can affect an individual's experience of autonomy. Carrying a BlackBerry shifts an individual's capacity to respond to emails at expanded times and locations. This very capacity may affect how much they chose to 'check-in' and respond to incoming messages.

Ken seemed to realize this evolution during an interview. After using the device for almost a year Ken asserted that the BlackBerry does not have an effect on his communication patterns. However, when I asked, "So, just to clarify, is it true that you're not checking email any more than you were before the BlackBerry?" Ken reflected, "I guess am checking more, definitely, 'cause I think that I have more access to it [email], so I definitely think I check more." Similarly, about a year and a half into using the device, Monica asserted that even though she felt in control of her messages she also usually chose to respond immediately on the BlackBerry. According to Monica,

Well, I've probably gotten an email that said "get back to me as soon as you can" or something to that effect. But, versus an email about something that isn't an emergency, I feel comfortable making a judgment call about whether or not I should respond to that. I probably respond more often than not because it usually doesn't take very long to respond, then it is off my plate.

Individual attorneys actively attempted to integrate the potential for constant access to email into everyday life in a manner that fit personal needs and honored social demands. Individual needs and social demands may not align. Linden attorneys found themselves caught in a bind. On the one hand, they enjoyed a relatively prestigious and autonomous existence. They worked on their own projects and were not subject to a strict organizational hierarchy. On the other hand, the attorneys framed client service as a principal aspect of being a lawyer. They

strove to be available to client demands in order to enact a valued professional identity. This desire is one of the main reasons they were initially positive about receiving a BlackBerry. Linden attorneys assumed the device could enable them to simultaneously fulfill two facets of their professional identity that are inherently in tension: commitment and autonomy. While the BlackBerry may have, in fact, fulfilled the desire to be both connected and autonomous, Linden attorneys were not taking into account how accessibility to email via the BlackBerry might affect the nature of client service in a new communication environment.

Evolving norms and active negotiation of BlackBerry use

Individuals made their own decisions about how to engage with email through the BlackBerry. Nevertheless, these decisions fed into a shared social context. Expectations evolved. By carrying a tool that enabled them to be available in expanded settings, lawyers slowly shifted the nature, expectations and experience of access. Checking email no longer entailed turning on a laptop or connecting through a land line internet connection. Rather, checking and responding to messages was often a short interruption. Lawyers may have initially felt they were choosing to use their BlackBerry because it was easy for them. But email is social. Every message read and responded to is a communication act. Information moved and expectations shifted. Over time they began to feel an implicit pressure to check the device more often and become more responsive. When everyone on the team knew that the capacity for easily checking was shared by everyone, not checking became a symbolic gesture.

Kathy noticed the subtle creep of assumptions that developed when a network of communication partners all carried BlackBerrys. After using the BlackBerry for over two years she said, "The instances of voicemails and/or cell phone calls have gone down significantly. People just expect you're checking your BlackBerry." James agreed with Kathy's perspective but sees this ease of use as leading toward a shift in the temporal location of work. After two and a half years of use he said,

I think people are more apt to just kind of forward something. What I think it does is it just kind of pulls some stuff out that would normally be done during the workday. I can do this now, forward it at night, rather than wait till the morning when I'm at my desk.

Further, James explicitly associated easy access to email with more intense expectations and the need for more active negotiation and boundary setting. Asked about expectations and BlackBerrys about a year into using the device he replied,

Yes, it makes it more difficult to set the expectation with the client. I mean some of the outside lawyers I deal with are much better, they go on vacation and let go. But, it's all about management. . . [*Because of the BlackBerry*] there are no more protocols. The default is the personality of the operator and the people who they are writing to. I think it takes a strong person to say, and sometimes its good service to, to say, "Hey, listen, I got your message, I'm not going to get to it until Tuesday."

Similarly, Mary sensed that the easy and 'unobtrusive' access to email enabled by BlackBerrys could translate into a frustrating shift in expectations and implicit demands. Her frustration grew over time and after approximately two years of use she said,

I mean, to me it's this passive/aggressive kind of way that people kind of get access to you ... I think they will sometimes email you knowing that if you see it, you'll feel obligated to do something about it. But it's not something - they would never pick up the phone and call you about it. But you know, if [*international colleague*] emails me on the weekend, I wonder, I guess he needs me or he wouldn't be emailing me, but I know he sure as hell wouldn't call me.

These reflections hinted at a subtle and insidious effect of carrying a BlackBerry experienced by this population of users. The potential for expanded access to email required individuals to negotiate with their communication partners from a different baseline. Once communication partners began to assume that others were accessible, boundaries shifted and individuals were forced to take an active stance to enforce time disconnected from work colleagues. James referred to the need to establish protocols with every new communication partner. This process takes time, energy, and continual negotiation between individual needs and social demands. Mary's internal dialogue regarding whether or not an email obligated her to respond is an example of such active negotiation. Linden attorneys fielded emails from international colleagues and, increasingly, from local colleagues who assumed expanded availability. They integrated email into what was once considered 'off hours' and they operated from the

perspective of a client service focused legal professional. Eventually, active negotiation of accessibility via the BlackBerry became fraught and challenging.

Mary recalled how the formal attempts by human resources and top executives to frame the devices as enabling greater personal freedom affected her initial orientation toward the tool. She related this memory to her shifting perspective on the BlackBerry. After two years of use Mary reflected,

You know, honestly, I bought it [*HR introductory letter*]. And I don't think that it [*the BlackBerry*] was intended to be able to get people all the time. But that's what it's become.

Why do I think it's become that way? I think 'cause we're all – we're all just too type A and we work too hard and we have – every person in our department has a work ethic that just kind of obscures other things that could go on in your life. And I know that I have trouble saying no, I don't like to say that I'm too busy or I have too much on my plate, that I can't take it or that I'm gonna quit. So it's like giving a person who has an eating issue a big chocolate cake. I mean, great, now, I can be tapped in.

Mary is not the only lawyer who ended up struggling with the potential for increased access in a role that embraced client service. Although Kathy emphasized that she would prefer to get a query through email she also reflected in the same interview (after two years of use) that,

I view the BlackBerry as a love/hate thing anyway, which you've probably heard before from a lot of people. . . . But when I say love/hate I mean it gives you a lot more flexibility, but at the same time it adds stress depending on what's showing up in the inbox. You know, if you're looking at something and you're like, "Oh, cool. I can just zip off a quick answer," it's great. That person has the answer. It's quick. Or, "Oh shoot. If I don't zip off an email right now I'm gonna forget." So this is an easy way of saying, "Okay, I'm remembering right now. I'm gonna send off a quick email."

So that part of it's great. The part of it that's more difficult is you're out of town, you take a look, you realize a large project has come in or a more detailed question or somebody wants changes to an agreement and, "Oh, it's urgent. Can you turn this around right away?" And you're not – you don't have the ability to do it. That's where the stress, for me at least, comes in. It's now, now you know it's there.

Kathy's husband was slightly mocking in his description of this scenario. Asked about his wife's relationship with the device Bob said,

It's fun to watch, it's just amusing, you know, just to see her. It's a tether. There's a slight tether to it, and I love that bit of it, just to watch. It's her – well, she's always been driven to do well at her job, and that's just another vehicle to do that. So, that's the tether.

Like Mary, Bob attributed Kathy's behavior to her 'personality.' This study does not investigate whether or not there are innate personality traits that lead one to crave constant connection and access to information. Regardless, a key element in identifying as a 'lawyer' entails seeing oneself as a certain type of person -- Mary described this as "type A." Such labels imply a general understanding of the 'type' of person who will be successful in today's professional workplace. Through BlackBerry mediated communication, these lawyers continually enacted to their communication partners that they were a certain 'personality.' With every glance at the BlackBerry they re-enacted and intensified shared expectations. The manner in which they chose to use their BlackBerrys reflected their sense of evolving shared assumptions. Their actions also reflected a professional identity that developed to embrace the trappings of a 'BlackBerry user' in the social and professional context of being a 'lawyer.' Expectations and identity interacted and intensified. Asked about evolving expectations of availability and responsiveness after two years of use, Monica's comments reflected this dynamic,

I think it's our personalities [*to be constantly available*]. But, I think the demands are different than they used to be. The expectations are that things need to be done yesterday and whether the BlackBerry feeds into that, or is a reflection of that, I'm not sure.

It is difficult to tease out the influence of a single medium of communication on the development of individual identity. However, it is clear that these BlackBerry users embraced a sense of professional identity that meshed with the features of this particular device. Even Devin, the most extreme BlackBerry advocate on the Linden legal team, noted how a new communication medium can inspire a shift in social dynamics. Devin's comments reflected the complicated dynamic between individual experience, professional identity, and social relations that develop as people embrace the potential for ubiquitous email. Devin related a paradoxical opinion:

I mean I just, I can't imagine life without *[the BlackBerry]*. . . No. I just don't see a downside to it. I understand what people mean about expectations; that with the BlackBerry people who send you messages expect you to respond faster, because they know you have the BlackBerry, but *[trails off]*.

Asked whether there was any cost to him personally, Devin went on,

To me, *[sigh]* I guess so. You know, so, um, *[long pause]*, it's there, but the thing is that I always thought that I needed to respond, quickly, anyway, and it *[before BlackBerry]* made it more anxious for me because I had to get to a computer. So, this relieves that stress. I don't, um, I don't feel that I am very effective at ever disconnecting from work, I think that is just part of the job. I think people expect the *[position of lawyer]* to be available, to know the issues, and to be responsive.

Within a matter of seconds Devin covered a broad range of experience with the BlackBerry. On the one hand he cannot imagine living without the device and sees *no* downsides to carrying one. Yet, he admitted that the BlackBerry did increase expectations and this shift led to personal costs. He then backtracked and asserted that, given his personality, he preferred easy connection, even in the face of evolving expectations. Devin's tortuous quote reflects the complex dynamic the Linden attorneys find themselves in. Although they initially shared a positive frame of reference, over time they struggled with how to incorporate a device that enables constant email into their lives.

Explicit negotiation of BlackBerry use

Linden attorneys struggled between assuming individual responsibility to use their BlackBerry in a manner that satisfied personal desires and addressing evolving social expectations. Interestingly, this struggle continued even in an environment of relatively equal power positions and among colleagues comfortable addressing issues. The legal team went on a retreat about a year after receiving their BlackBerrys and explicitly discussed their experience with the device. Individuals shared a sense that, due to BlackBerrys, expectations had shifted regarding availability and responsiveness. Often the process of 'active negotiation' between individual action and social relations is implicit, and negative social dynamics evolve due to a lack of direct communication. Therefore, it is noteworthy that the lawyers attempted to confront this issue head on. The discussion reportedly centered on how individuals should

interpret incoming emails during off hours and the appropriate steps expected to deal with these messages.⁶⁶ Mary initiated the discussion by describing a feeling of internal pressure to reply to messages that were not sufficiently urgent to warrant weekend communication.

According to Mary,

I think people are torn between resenting it [*the BlackBerry*] and valuing it as a way to be able to be at the playground – and it’s just a double edged sword... It’s like, if you wouldn’t invade my space in a personal way, why can you not wait till Monday? And you know, [*General Counsel*] and I talked about it after, ‘cause she was concerned that maybe my comment was at her. But, I know her well enough to know when she’s just emailing me because she finally has time to take a breath and go through emails and just sort and when she’s emailing me because she needs me.

Others assumed that Mary’s comments were directly related to the General Counsel. Monica reflected,

We had a legal department retreat last week, one of the attorneys made a comment that she would rather get a phone call on the weekend if something was urgent than a BlackBerry message. And, that was directed pretty much at [*General Counsel*], and I disagreed with that. I would rather [be contacted through email], if something is truly urgent and needs my attention, we all have each other’s home phone numbers. You can call me if something is truly urgent but a BlackBerry message, unless, I read urgency into it I may not respond to it. Or, if it’s just a quick answer I may respond to it on Saturday or Sunday. But I think a phone call would be much more intrusive. I guess the individual just wanted to let us know that she felt there *was* an expectation that she would have to reply to things that weren’t urgent. But [*General Counsel’s*] position was, “I’m just catching up on my emails, or sending an email while I’m thinking of something, while I have some free time over the weekend, so if I had an expectation that you need to get back to me I would say it in the message.”

James described the General Counsel in similar terms. However, he admitted that being exposed to incoming messages over the weekend affected what is in his head regarding work,

⁶⁶ While I did not attend the retreat and was unable to observe this exchange I interviewed four members of the legal team within three days of their return from the retreat.

She's, you know, a lot of times you need to just realize that she wants you, but she's not expecting anything. It's the expectation that you will respond when you can. But if she responds to you two hours later on a Sat I can't deny the part of me that might be thinking [*sucks in breath*], what is this going to be? It doesn't necessarily change my expectation but she tells me what is going on, she makes comments, and now I know where she's at. I triage that.

The General Counsel also weighed in on discussion. She spoke explicitly about how she does not want other lawyers to assume that her actions are a referendum on behavior. Asked how she communicated this expectation the General Counsel reflected,

It's scary, I have to, I don't always recognize that in general. I mean I left here at 8:30 last night. And I don't expect people to do that. But it is very hard for them not to get the message that I expect them to do that because I'm here. So, it's a struggle, yah. So, you could say a lot, "It's ok, go home" but people aren't going to hear that if I don't go home. And it's the same thing with the email, if I'm responding. So, after our discussion I may be a little more aware, myself, to be careful what they see.

The General Counsel was sensitive to the fact that modeling played a role in shifting social expectations. She was aware of her power position and described trying to modify her actions in order to stem the implicit escalation that emerged when people observed the behavior of the boss. The group spoke directly about expectations to each other and each lawyer described trying to set boundaries in order to maintain a focus on their family while staying connected to email during off hours. Such explicit discussion and internal awareness likely dampened the amount that the group used BlackBerrys to increase connectivity.

Doubtless, these factors played a role in limiting shared expectations of availability and responsiveness. Yet, discussion and awareness were not sufficient to enable these lawyers to live peacefully with their BlackBerrys. Surveyed approximately a year after the retreat every single lawyer reported that he or she did not recall any additional explicit discussion about expectations and BlackBerrys. Further, each lawyer felt that expectations had increased. Several admitted that carrying the device and maintaining a sense of work/life balance had become increasingly a challenge. Asked "What sort of expectations do people have regarding how you use the device? Who has such expectations?" the attorneys related a similar perspective.

After two years of use Kathy related,

I think people generally expect that you're checking e-mail on a fairly routine basis and, therefore, that you will respond more quickly and possibly after traditional work hours -- especially if it is a relatively quick question. The expectations are typically from people who have them too (Level 8 and above) and therefore know that is easy to be "connected."

Similarly, after almost three years James wrote in response to an email survey that there was "No real clear - direct - expectation of how you use the BlackBerry. Rather, the implied expectation is that you respond to messages outside of normal business hours." Others were more explicit that expectations had evolved over time. After almost three years with the device Tony reported,

If you're working on a really important matter I think over time (since we got them) there is an expectation that if you have one you must be plugged in over the weekend...not sure that was always the case...when I say critical I don't mean a closing occurring on Monday but, you know, other important stuff that in my humble opinion could wait until I'm in on Monday...

And after a year and a half of using the BlackBerry Mary wrote in response to an email survey that the most frustrating thing about using the device was, "Definitely an increased expectation that you are always available. Although this may have been the expectation of certain high level execs prior to BB - there has been a trickledown effect."

Monica revealed an interesting change in orientation over time. She was generally positive about her BlackBerry a year and a half after receiving the device. Asked about evolving expectations at that time Monica described,

On the whole, it [*the BlackBerry*] makes my life a little less stressful in that I don't have to call into the office. I know that most people can reach out to me, even though I'm not here. So, in that sense it is less stressful. On the other hand it is harder to be disengaged. But, I wasn't very good at being disengaged anyway.

A year later, Monica was forthright and frustrated, asserting that expectations had changed dramatically,

Despite protests by some management that expectations have not changed ... they have. [*General Counsel*] and others have an expectation (whether they will admit it or

not) that we are religiously checking email messages. If anything, it has become even more ingrained in our culture that messages are read when they are sent - and that a response should be forthcoming. I believe that voicemail messages are a fraction of what they were 3-4 years ago.

Consequences of BlackBerry use

After three years of use the lawyers found that in continuously re-framing the BlackBerry they had moved far away from their initial technological frame of reference. Their shared orientation toward the BlackBerry was much more skeptical. The device that promised to enable their role as client-service-oriented legal professionals did so at the peril of work/life balance. The BlackBerry ushered in a shift in the experience of working as in-house counsel at Linden. Ironically, the very factors that encouraged a positive initial frame -- identity and work practice -- were what made it difficult for Linden attorneys to embrace the potential for ever-present email without suffering personal costs. Professional identity challenged individual drive and ability to set boundaries.

Communication patterns and the nature of their work inspired the group to assume that everyone should take advantage of the potential for connectivity. Individuals shifted their communication patterns and eventually felt that clients and the General Counsel had shifted their expectations as well. BlackBerrys did not cause this evolution. The group developed a shared understanding that connecting to email via the BlackBerry was easy and unobtrusive. Over time, individuals experienced their own initial assumptions as a shared social pressure. Asked the worst thing about carrying a BlackBerry Mary admitted after approximately two years of use that it was,

Feeling like I have to – there's no excuse for not, within three hours, there's no excuse for not having seen something come in. When I didn't have it and I would still check my email. I could justify to myself nobody expects me to sit around all day on a Sunday if nothing's going on. But now I will check it in the morning; I'll check it before I go to bed.

Her description of the best aspect of carrying a BlackBerry was surprisingly similar. Mary simply said, "I feel like it allows me to live up to the expectations of my superiors more." Asked

whether or not these expectations have changed since the advent of BlackBerrys at Linden she reflected,

Probably. So it's not the same expectations that you were trying to live up to before? I mean, I guess they – when they weren't aware, I never had anyone say, I emailed you and you didn't email me back. But now they would. I think their expectations have changed.

These lawyers identified with their job, saw themselves as connected to a tight group of colleagues, and wanted to succeed in a particular organizational environment. They participated in evolving norms and strove to live up to evolving expectations. After three years of use, this population experienced their BlackBerrys as a barrier against real disconnection. After two and a half years of use Ken asserted that the biggest downside to the BlackBerry was constant connection. "Now they know that you are there, you can't, you don't ever have the excuse, you can't ever say, 'I didn't get that,' you know." James described the worst aspect of the BlackBerry in similar terms. He noted that, "The accessibility cuts both ways. I think about work more." Tony was the most vociferous about the frustration of losing the ability to truly disconnect,

The thing is, when you say, "I'm being forced into being more efficient with my time" it is a translation for, "You're cutting into my personal time. You're cutting into my time." So a business might say, this is a tool that is gonna give you more efficiency – I can take the flip side, it's like, "no, it's a way for me to lose my personal time."

Spouses were aware when their husband or wife did not entirely disconnect from work. Tony's wife, Abby understood that the BlackBerry has inspired a shift in Tony's relationship with work. According to Abby, "The worst thing about the BlackBerry is that he can't – his workday is extended. That's the huge thing I would say about it. You can't finish your day. Good or bad, it's still going on." Michelle's husband noted a similar trend,

Well, I think Michelle probably works more from home when she's not in the office, than she would if she didn't have a BlackBerry. And it's not so much time away from other things, because she's doing other things. But, I think, we no longer do one task at a time. It's like, you're doing your grocery shopping and you answer a couple emails while you're standing in line or, sitting at a stoplight and checking some emails. It's that you carry work with you all the time. You have no separation between personal life and work life. It is always part of what you do.

In Tony's words,

There's a lot of my personal time that this piece of equipment has no business in. And if the people have the expectations of that, then I probably don't want to be associated with you on a long term basis, because that's not my philosophy.

Once an individual has a BlackBerry, disconnecting from email is a choice rather than technical limitation. BlackBerry users have to decide when and where to 'check in' and how to respond to each waiting message. When an individual sits down to check email on a traditional computer they are obviously creating spatial and/or temporal distance from other social situations. The size of a computer or laptop screen blocks the user from others in their environment and provides a cue that they have retreated into email. BlackBerrys, on the other hand, allow users to merge email with social situations in a manner not always immediately perceptible to others. BlackBerry communication is opaque. Those around BlackBerry users are not provided obvious cues that a person has 'disconnected' from his or her immediate situation in order to connect with email. As Mary's husband Tom described,

She'll glance at it. It's funny, she'll pick it up and be on her way from, I don't know, closing the door to opening up the refrigerator, and she'll pick it up and kinda zombie walk over to the refrigerator and look at it and then put it down and kinda carry on with whatever she was saying. That can be a little disorienting if we're doing something – if we're preparing dinner or something. I guess it's easier to notice if you're not the one using the BlackBerry. But, it kinda puts her on pause for a few minutes.

Mary was aware that by checking her BlackBerry in the evening she was affecting those around her. She admitted that she and her husband had talked about the role of the BlackBerry in family life and described the difficult situation of attempting to stay connected while respecting the family. After carrying the BlackBerry for over a year she related a story about a specific evening,

I came home and my husband had been doing double duty. And I had my BlackBerry and I put it down, and I – from like 9:30 when I got home, whenever I looked at it, I tried to be looking at it when he didn't see me, 'cause I know he resents it.

Most of the Linden attorneys had young children and were trying to balance the various demands of work and home. These attorneys found themselves in a situation where the potential for connection led to a sense that they could not completely turn away from their

BlackBerrys. As such, it became a challenge to carve time to focus entirely on family. This dynamic contributed to an experience of ongoing struggle to find balance. As Ken described,

The BlackBerry is difficult because we are all working parents. You see the red light [*alert that a message is waiting*] and are immediately curious who it is. It's like, I know I need to spend time with [*young daughter*], she is going to bed soon and I don't get enough time with her as it is. But you see that red light and are tempted to check. Especially if you worked for a place before you had kids, they're used to you working a certain number of hours, staying late. Now, everything is different. It's something that every working parent has to negotiate.

Mary hoped that carrying a BlackBerry would be good for her family. She said that initially,

I thought it was neat to be able to take it places. I felt like "Oh, good, I'm gonna be inhibiting my family less, because I won't say I have to camp out at home because I'm expecting an email so we can't go to the park or something."

Asked whether that proved to be the case, she described a more complicated interaction between constant connection to email and time with family.

Yeah, it has [*been the case*] to some extent. But it's also meant that whereas vacations before, you'd really have to make an effort and go find it [*email*]. And I wouldn't do that unless it was something really critical. Now, it's taking it [*email*] whenever we've gone somewhere. It means I never relax.

Pushed to elaborate on whether or not the experience of carrying a BlackBerry affected the character of the family vacation she admitted,

I think it does. Because it changes my mood. I remember driving up to the White Mountains on Labor Day weekend this year and I was checking something, and that email had something that pissed me off and I just got all angry in the car, and I know Tom was like, "You're on vacation, you know?"

She correlated carrying a BlackBerry to increasing daily stress. According to Mary,

It contributes to it [stress] a lot. Because again, I don't create boundaries for myself, and the BlackBerry is just another crutch, in the short term, every day. I don't think about it in the long term, I just use it as such a here- and-now kind of thing that it's short term. But, I think it could contribute to relationship issues over the long term.

The sense that carrying a BlackBerry has made it impossible to escape work was shared among Linden attorneys. Although they were willing to describe many positive benefits of this connectivity, they became more and more eager to point out where this technical capacity led

to personal cost. After three years with the BlackBerry both Kathy and Michelle emphasized how their orientation to the device evolved. Asked the most frustrating aspect of carrying a BlackBerry, Michelle took a tone of resignation. She wrote in a conversational email,

Can I ever escape it? We're off to the Caribbean next week and I have already checked to confirm that reception will be available. Don't plan to check regularly . . . but am sure that I will be turning it on periodically. Tough to cut the ties that bind . . .

And Kathy admitted that,

Sometimes, it creates more stress, rather than relieving it. For example -- if work is piling up fast and you know that you don't have the time to address something properly/immediately. The "Can you revise this document quickly for me? I need it for a meeting before you're in the office tomorrow morning" kind of thing.

How people use the BlackBerry emerges from the ongoing relationship between technological capacity and concrete action, individual drive and social dynamics. When Michelle asked if she could escape "it" she is talking about her BlackBerry, but implicitly referring to the email messages from work that she receives through the device. Kathy asserted that "it" creates more stress but then described the BlackBerry as conduit; the tool enabled her to receive a query from a colleague asking for Kathy's input. Because the sender knew that Kathy had a BlackBerry he/she assumed that Kathy received their query. Therefore, while Kathy blamed the BlackBerry, she knew that the social expectation was the real culprit of her stress. Professional identity, work practice, and social dynamics created an environment where Linden attorneys felt that they needed to take advantage of the capacity for increased access to email in order to succeed in their jobs.

Asked, almost two years after beginning to carry a BlackBerry, whether or not the device affected his stress level, James struggled to describe a relationship between his individual desire for information, a technology that enabled access to email, and a work environment that encouraged connectivity. According to James,

Stress level? You know, I think it's, [*very long pause*]. I guess there's a chicken and the egg, right? With all the stress of the unknown, ok, "What's waiting for me at the office, what's in the system from a work standpoint." Because so much of work is email. So, it's nice that I can check it and relieve that form of stress. Yah, it does kind of 'relieve' stress in that way. The flip side is that - the subconscious is that, it is always there. There is

always the sense that you need to check. Really, I don't think it *adds* stress. I don't think the *device* adds stress.

Asked whether there is a cost to not being able to disconnect James continued,

Oh, yah, number three in the U.S. behind obesity and smoking is work stress and how BlackBerry [*laughter*] causes that. No, again, I don't blame it on the BlackBerry, I think it's just another device that is kind of speeding up of life. There will be another evolution beyond it, another product. So, I think, in that context, it's the absence of disconnect [*that is the problem*], ... It's the kind of creep into what should be weekends, vacation, when you check out and recharge, which is critical for long term success and health. And so, that is the problem. This [*BlackBerry*] is not the cause of it, but it enables and enhances the kind of deterioration of that wall.

James's circuitous answer highlights the numerous factors at play in determining how one person experiences a new medium of communication. The BlackBerry did not cause James to claim he was stressed; in fact the BlackBerry, according to James, alleviated the moment-by-moment anxiety of not knowing what is waiting in his email inbox. Over time he too told of costs that come with the inability to disconnect.

At the conclusion of this study, individuals continued to struggle to accommodate expectations in light of their claimed goals of work/life balance. Their explicit attempts to actively negotiate when and where to use the device were subverted by clients and colleagues who expected availability, by work practices that encouraged 'off hours' communication, by a professional identity that embraced client service, and by a strong team mentality that fostered shared expectations. In this collegial and tightly knit group, individuals felt the need and desire to interact with email throughout their time away from the office.

The story of Linden attorneys is a compelling example of how individuals, within a profession, within a group, and within an organization, experienced a new channel of communication. These data outline how initial frames influence use, how individual patterns of use shape the development of shared norms, and how norms engender personal consequences. Table 3 presents representative quotes to illustrate this process within the Linden legal team.

Table 3: BlackBerry experience over time - Law

Initial Frames	Use	Norms	Consequences
<p>It goes back to what [the CEO] said when they first gave the BlackBerrys to us. "Listen, we're telling you now, we don't want this to be more work. "</p>	<p>I wear it on my body. It's funny, why do I bring it here? I don't really need it, but I bring it here.</p>	<p>I think people are more apt to just kind of forward something. It pulls stuff out that would normally be done during the workday to be done at night.</p>	<p>It contributes to it [stress] a lot. I don't create boundaries for myself. And I think it could contribute to relationship issues over the long term.</p>
<p>Most of us came from big firms which is why we're a conducive team and why we're very committed to our work and responsive to our clients.</p>	<p>If I'm looking at my BlackBerry at 5:30 in the morning it's already almost noon in Europe. If I wait until I get in the office to start even thinking about what their issue is, I've already lost some time.</p>	<p>If anything, it has become even more ingrained in our culture that messages are read when they are sent — and that a response should be forthcoming.</p>	<p>It creates more stress. The "Can you revise this document quickly for me? I need it for a meeting before you're in the office tomorrow morning." kind of thing.</p>

Further, this story reveals how initial frames of reference can evolve and shift in dramatic and counterintuitive ways. Positive expectations of the BlackBerry encouraged Linden attorneys to embrace the tool and integrate it into life outside of the office. In a context where characteristics of the job and professional identity encouraged greater access to email, individuals used their BlackBerry to check emails throughout the evening and on weekends. As individuals in this tight communication network became more accessible to email, their colleagues began to assume, and then expect, availability.

In other words, the same aspects of the job and identity that inspired initial excitement led to ongoing challenge. After several years of use, individuals found themselves in an ongoing struggle to integrate the capacity for constant connectivity into daily life in a sustainable manner. It might be easy to assume that the potential for constant connection inevitably leads to this dynamic. Yet, a sharp contrast exists in the same organization. While the Linden attorneys initially shared a positive frame toward the BlackBerry, the mobile sales force was

more negative and ambivalent. As they took advantage of the expanded capacity for email, this perspective gave way to a positive view of the device and experience of personal gain. The following chapter traces how Linden sales representatives engaged with their BlackBerrys during the same period as the Linden attorneys.

Chapter 5: Linden U.S. Field-based Sales Force

This chapter describes how Linden field-based sales representatives engaged with their BlackBerrys and each other during their first three years with the device. It examines how individuals framed the BlackBerry prior to using the device (in light of cultural symbolism, initial introduction and a sense of how the tool might enable or constrain work and identity practices). It traces how initial frames influenced how individuals used the device and how individual understandings of the tool evolved over time. While similar in structure, this chapter tells a dramatically different story from the last. Linden sales representatives underwent a process of understanding and engaging with the BlackBerry that is distinct from that of Linden attorneys, information workers studied in past research (Mazmanian, Orlikowski, and Yates 2006; Middleton 2007), and popular conception of the device as creating 24/7 connectivity.

This chapter relates how and why individuals who initially held diverging (and often negative) opinions of the BlackBerry developed positive frames of reference toward the device over time. It describes how Linden sales representatives learned to appreciate their BlackBerrys as a technology that allowed them to achieve personal gain. These individuals did not experience the BlackBerry as creating expectations of connectivity. After three years of use the vast majority felt they were able to use the device to become more efficient during business hours and, in turn, expand their personal time in the evenings and on weekends.

Framing BlackBerrys: Linden U.S. field-based sales force

Prior impressions and introduction to the BlackBerry

BlackBerry impressions

Members of the U.S. field-based sales team at the top of the hierarchical pyramid received BlackBerrys at the leadership retreat in June, 2005. The rest of the team did not receive (or

know they were slated to receive) their BlackBerrys until four months later. Therefore, while the entire sales force developed prior expectations of the device based on external sources (friends, colleagues, or the popular media), the majority of BlackBerry users had the opportunity to create opinions about the device based on direct observation of their superiors. Sales representatives developed a range of impressions about the BlackBerry prior to receiving one. Table 4 provides a breakdown of initial impressions of the BlackBerry held by the sales representatives interviewed for this study. Some described lobbying for the device and many insisted that they wanted nothing to do with it. Such divergence in prior expectations reveals a variety of ideas about what a BlackBerry is and how it fit into their sense of the job and sense of self. Sales representatives carried strong opinions about the BlackBerry prior to knowing they were set to receive one. The level of animation and thoughtfulness apparent in their statements reflects the degree to which initial expectations orient a framing process.

Table 4: Initial impressions held by in the U.S. Linden field sales force

	Initially positive	Initially negative	Initially ambivalent
Interviewees spoken with prior to receiving the BlackBerry. N = 19	3	11	5
Recollections from interviewees spoken with after receiving the BlackBerry. N = 28	9	14	5
Total N = 47	12	25	10

At one extreme was Nate⁶⁷, a senior account executive⁶⁸ who handles national accounts. Nate believed that a BlackBerry would benefit his work practices. Further, he correlated having

⁶⁷ In order to preserve confidentiality all informants are given pseudonyms. Although position, type of accounts and gender accurately reflect the informant, description of the product line the sales executive is responsible for is not included in contextual information.

⁶⁸ Specific titles such as “senior director”, “senior account executive”, “account executive”, or “field service representative” reflect the internal titles used to delineate position in the Linden sales force. The term “sales representative” denotes any member of the field-based sales team.

the tool with being responsible for a certain amount of revenue. For Nate, the BlackBerry aligned with his sense of work practices and his sense of identity as an 'on the go' 'tech savvy' guy. In response to a question about whether or not he would want the device Nate responded,

You're edging into *[Laughter]* that frustrating territory. You know, I think at this point, with a certain number of revenue dollars and, you know, someone who sends 30 to 50 emails and gets the same number, and travels with communication, and the expense of it--it's silly not to have one. But, that's one of those things about the corporation.

Asked his impression of the general understanding of BlackBerrys held by sales representatives as a whole, Nate did not assume his opinion was shared by everyone. Rather, he described an internally delineated segregation of sales representatives within Linden, over half of whom he associated with needing or wanting a BlackBerry.

Well, depending on – I mean, there's reps out there who don't like to turn on their computer and then there's the opposite side, which I think is me – someone who embraces technology. So you'll find both sides of it, but I would say, you know, 80% - well maybe not that high. Maybe 60% of those in the field need and require that level of communication.

Kurt, another senior account executive who handles key accounts, reflected a perspective similar to Nate's. Both men associated responsibility for a certain type and size of accounts with a generalized orientation toward 'technology' and the need for BlackBerrys. According to Kurt,

I know all the managers, the regional managers and directors and people, all the higher-ups, the monkeys up there in the tree have BlackBerrys. So, we're hoping that that filters down to those of us in the field. And, in particular, there's probably a handful of us that, you know, work with the key accounts that tend to be a little bit more up on the technology. Not that our jobs are any more important, but obviously, like I said, there's more people involved in your business when you're in this situation, as opposed to when you're in the field with a big territory. So for us, it would be – it would be better, more productive.

Although neither of these men knew how the BlackBerry would affect their lives on a day-to-day basis, each developed a working hypothesis of what the BlackBerry represents. Each carried ideas of how it would fit into their work, and why their position as a key or national account representative warranted being given the tool.

At the other end of the spectrum, Dan related a more generally shared assumption about the connection between doing his job well and carrying a BlackBerry. Dan is responsible for approximately 150 independent accounts and sensed that having a BlackBerry would not help him communicate in a manner that would facilitate his overarching goal of selling shoes. Because Dan is regularly traveling and dealing with accounts that are not on email he framed the BlackBerry as something that would hurt his ability to be a good salesman. According to Dan,

I don't want one. Right now, when I go on the road I carry a laptop. I carry a cell phone. I carry a bunch of catalogs. The last thing I want is another thing strapped to my hip. And then during the day when I'm traveling anyway, the only time I could really use it is when I'm sitting in the airport. I'd rather just have an airport service for my laptop. Otherwise, I'm driving on the road. I can't do it then. Then I'm in an appointment. I'm rushing from here. I'm rushing from there. So, I would prefer not having one. I don't think I could really utilize it anyway. Like, when my manager's in town, he's the one sitting in the passenger seat so he can play with the Blackberry while I'm driving. And when he's not with me I'm still driving 'cause I'm by myself.

Others also formed an impression of the BlackBerry by watching their managers. Matt, who is in charge of developing training programs for sales representatives, also did not want to mimic the world of management. Asked his opinion of the device prior to receiving one he responded,

It's not so much for me. I mean if we could eliminate something and use that more exclusively then I would probably be more open to it [*the BlackBerry*]. But so far, a lot of the [*leadership group*] people they still have their cell phones. They still have to use their laptops. You know some people like all that extra access. But with a wireless card in my laptop, I don't find it necessary, personally.

Pushed to discuss his impression of whether the device might affect day-to-day life, Matt admitted an assumption that carrying a BlackBerry implied a new level of responsiveness. "For me it would be an effect I wouldn't want personally, because it would be another piece that you have to track/check."

Nate, Kurt, Dan, and Matt expressed well defined ideas of what the BlackBerry represented and whether or not it would enable them to do their job. Implied in these comments was a sense of how it might affect their ability to be the type of salesmen they want to be. Most sales

representatives were more ambivalent about the device. After describing how useful he thinks the BlackBerry is for his boss, Ken, a senior key account executive, wavered when asked directly whether or not he wanted one, "I'm mixed actually. As much as I want one, I know they can be addictive." Asked the origin of his opinion, it is clear that Ken had spent time thinking about how the device might affect his work practice:

I've asked many questions to people that use them. In and out of Linden. This company sometimes never sleeps. So from that perspective, I'm not a big fan. But on the flip side, if I'm driving, say I'm driving down to [major airport], which I fly out of, and I live in [location of home], I'm out of touch for an hour and a half. Sometimes a lot of things happen in that hour and a half, certainly, with the nature of my account. Then I'm in a cab when I get to New York into Manhattan, so there's another hour. So really, the only time I get when I'm traveling is when I get to the concourse at [major airport] and when I get to the concourse at LaGuardia. Four hours later, I get to our showroom in Manhattan. So it would be nice to have a BlackBerry just so I could be aware of things that are happening while I'm traveling. But my fear is that now I've got that and now I'm just – I'm accessible 24 hours a day, and I don't want to be that guy.

Donald, also a senior key account executive, took Ken's analysis one step further by reflecting on the fact that people might interact differently through new technologies. He feared that carrying the device would affect the patterning and amount of communication he has to deal with on a daily basis. Prior to receiving the BlackBerry Donald restricted himself, checking email only three times a day. He consciously did not stay online during office days other than those three periods. Asked about his opinions of the BlackBerry he wavered,

I guess I'm a little torn. I have somewhat ambivalent feelings about a BlackBerry, that it certainly would help, once again, be more effective and utilize what might be dead time during the day. It's back to the email thing; if you send more, you're gonna get more responses, and it kind of becomes a self-fulfilling prophecy.

Asked whether having a BlackBerry would affect his policy of only checking email three times a day Donald was adamant,

Oh, it would change that profoundly. And my boss, if he were here I think what he would share is that he's constantly on BlackBerry. Yep. So I think three times a day goes out the window pretty damn fast.

Jeff, a senior account executive who handles major department stores, was similarly ambivalent. Asked what he thinks of the device, Jeff called on a cultural assumption that

BlackBerrys foster 'addictive' behavior and a sense that his attachment to both the identity and practices of doing his job might lead him to behave in an unnecessary and potentially unsustainable manner. According to Jeff,

The emphasis is *crackberry*. You know, I don't know. Sometimes I think I would [*want a BlackBerry*] because, I think I'm a pretty hard worker and tend to be pretty involved with my business. And working out of my house, walking by my office, I can always think of something I probably need to do. But, for that reason I also don't want a BlackBerry. Because it's one of those things that when you're away, nobody can bother you. You know what I mean? It's one less way that you can get bogged down. And I would think if I had one, I would be answering emails waiting at traffic lights. And I don't think anything is that pressing.

Sales representatives carried strong impressions before ever using, or knowing they were about to use, a BlackBerry. By watching others, individuals developed an impression of how a device might fit into doing their job, whether it would enable or constrain key communication acts, and how it might contribute to their ability to enact a valued sense of self. But, they had no real sense how the device would fit into daily practices. Many of these quotes reveal how initial assumptions are based on abstract representations. People developed a sense of what type of person utilizes a certain kind of technology and extrapolated a sense of what using the tool might imply for their priorities, their job, and their sense of self.

Such expectations are potent yet fragile. Initial opinions orient what people see, how they make sense of additional information, and where they choose to spend their time and energy. As people accumulate information about the device and experience use-in-practice, they re-establish and modify initial assumptions. How the technology is first introduced to a potential user group is critical as they immediately begin developing contextually specific frames.

Geoff, a senior account executive who sells to over 120 independent accounts, related his pre-opinions of the BlackBerry to assumed expectations of the device. Geoff's perspective highlights how the message that accompanies roll-out is a key moment for influencing technological frames. Geoff carried a working hypothesis as to why the company would choose to provide BlackBerrys that was in stark contrast to the rationale given at the leadership

retreat. Whether or not his assumptions were challenged depended on the manner in which the device was actually rolled out. According to Geoff,

If they gave me a BlackBerry, they would want improved communication, which means that they want you to respond to messages quicker. We all have laptops, we all have access to email; what's the use of a BlackBerry but besides being able to look at your messages more and communicate even faster?

BlackBerry 'roll-out'

In 2005, it was not common for shoe salespeople, or their buyers, to carry BlackBerrys. Asked if people at her key accounts had BlackBerrys, Carol, a senior director, said, "Oh no, I don't know anybody who does. They're lucky they have computers. They just got laptops recently. The retailers, they don't have money for that." This assumption that BlackBerrys were not a common technology for people in their field was shared. Therefore, many individuals in the sales force expressed surprise when they learned that across the hierarchy they were to receive Blackberrys.

The roll-out of BlackBerrys to the field-based sales force contrasted starkly to the fanfare accompanying the BlackBerry roll-out at the leadership retreat. Approximately three months after the leadership retreat the sales force received a bulk email announcement from a new employee in the IT department (see Appendix 8). The device showed up on their doorstep about a week later. The content and tone of this introduction led users to create a certain impression of the company's goals and expectations regarding the device. Although the tip sheet developed by HR was included in the materials sent with the device, it was part of a variety of orienting documents. It was not referred to explicitly or presented in such a way that it would stand out as an important message coming from leadership. For these sales representatives, the language of the announcement email became the primary reference point for initial framing of the device.

Appendix 8 provides the full text of the introductory email. The message began with the language,

Hello,

In an effort to improve your ability to manage work and communications while traveling, we're happy to announce that you will be receiving a new Blackberry handheld soon. The device is now being configured for you and will ship out to your home address in the coming weeks. If you do not want the Blackberry for any reason, please contact your manager immediately to discuss your decision. You need his/her approval to not receive the Blackberry. You must reply to this e-mail within 5 business days to decline acceptance of the Blackberry. If you will be in the [headquarters] office between XXX and XXX and would like to pick up your Blackberry rather than have it shipped, please also notify us within 5 business days of today's date.

The difference in how the legal team and senior management in the sales force on the one hand, and more junior sales representatives on the other, were first introduced to the BlackBerry led to different impressions of the device. These discrepancies provide valuable insight into how initial roll-out contributes to sense-making, framing, and use of a new technology.

Within a few weeks of receiving the device, Sam, a senior account executive in charge of key accounts, represented an impression of the BlackBerry held by a majority of those in the field. Sam was hesitant to accept the BlackBerry and unsure whether he would be able to live up to the expectations he believed accompany the device,

I guess it's a nice thing on their part [*giving the BlackBerry*]. But I really don't know that they will get the return [*on investment*] on it. Like I say, I wouldn't have time if I'm traveling to be dealing with email all the time -- generally what you're going to get on an email is a request for some information. Well, I've got to fire up the laptop to find that stuff anyway. And we've all got wireless cards and everything. So, I mean, I don't think there's anything I can really work on [*on the BlackBerry*] that would make me more efficient or quicker than I am now.

The field-based sales force is dispersed and mobile. Therefore, individuals did not have an opportunity to come to a shared consensus about what BlackBerrys meant in the context of their work and life. They did not spend isolated days in a leadership retreat bouncing initial impressions off each other. They did not hear consistent messages from senior management. In

fact, the top senior officers in the company disagreed over who in the sales force should receive a BlackBerry⁶⁹ and this confusion led them to project mixed messages to the rank and file.

For example, a week after the entire sales force received BlackBerrys, a Senior Vice President did not have an accurate sense of who, on his team, was actually given the device. Asked about the decision making process regarding who got the BlackBerry and why he said,

It was just because they travel, salespeople travel a lot, and there is a lot of downtime. It was not specifically asked for, to my knowledge, at the account executive level, and that is where I think the decision-making process broke down, because I was not aware that it had been approved for account executives. I did not think it needed to be approved for account executives. Most of them don't travel that much.

When asked whether the device was being given to field service representatives (who had already received a BlackBerry) he replied, "I do not think so. I hope not. They don't need it." Given his assumption that many within the sales force should not have received a BlackBerry, the Senior Vice President decided that regional managers were to emphasize that the device can be returned. Asked whether or not he discussed expectations with subordinates:

I went out to my folks and said, "Guys, you need to be adult about this." I mean, make sure this is a help, as opposed to rolling out technology for technology's sake. I don't want people having it who don't need it. It did, it got bigger faster than I thought it needed to.

Yet, very few account representatives ended up with the impression that returning the device was a real option. Following the senior vice president's request to reiterate that the BlackBerry should not be kept if individuals did not feel it would be useful to their daily work practices, one regional manager, Martin, sent an email to his direct reports days after the message from the IT department.⁷⁰ While this follow up message emphasized that the

⁶⁹ Initially, it was decided that the entire international sales force were to receive BlackBerrys. Once the charge to individual cost centers was established, the number of international recipients was cut back dramatically.

⁷⁰ To my knowledge Martin was the only regional manager who followed the Sr. Vice President's request to follow up with their team via formal communication.

BlackBerry can be returned, it did not engender a sense that returning the device was encouraged:

Team,

My understanding is that you will all be receiving or have already received Blackberry's [sic]. These can be a very useful tool to stay in touch, especially when you are traveling. However, I ask you that if you do not plan to use it, please contact IT and send it back. I encourage all of you to try it out first before you make your decision.

Martin

Given this introduction, most sales representatives told me they felt they were expected to keep, and use, their BlackBerry. Asked if there was a choice about whether or not to accept the device one key account executive, Sam, described his interpretation of the emails from IT and from Martin,

Yeah, I think there was [*the option to return the BlackBerry*]. But, I don't know if anybody's gonna, hand it in. I've still got the email in here somewhere, here it is. Somewhere it said in here if you don't want it, oh, yeah. "If you do not want the BlackBerry for any reason, please contact your manager to discuss you decision. You will need his or her approval to not receive the BlackBerry." So, it's like, yeah. I'm really gonna say, "No, I don't want it." No, I don't think so.

Tabitha, an account executive in charge of approximately 75 independent accounts, interpreted the expectations of leadership differently. Asked about whether or not she sees the BlackBerry as implying additional expectations she immediately referred to the return policy,

I don't think so. I think they gave it to us, and it's kind of in an experimental phase right now, but also that the fact that they've given people the option to not take it, I think, expresses the message that everybody has some freedom here.

Asked where she got the impression that returning the device was an option Tabitha revealed that, while she read the introductory email from IT, her assumption was based on comments from her manager (not Martin).

I think it was written in an email, but our direct boss did discuss it with us. So that makes it [*returning the device*] a lot easier. I don't remember exactly what was said, but he did mention that we are getting it [*BlackBerry*] and to see what happens, give it a try, and nobody is expected. It's not mandatory.

Each sales representative created his or her own sense of why the BlackBerry was rolled out to the broader sales force and what the device implied. Unlike the legal team, these initial technological frames of reference did not converge. For example, Tim, a senior account executive in charge of national accounts, related his view of how he made sense of the BlackBerry. Asked about explicit or implicit expectations regarding the BlackBerry, Tim says,

You know, actually we were given a little package when we got our BlackBerry. But it wasn't necessarily expectations. I think at least at this level reps tends to be pretty professional. It was more about content. I think the email was more of, "Hey, look, you know what, basically, your BlackBerry is like your online office." You know, "There's certain parameters. We don't want things going back and forth that aren't business related."

Asked about whether there has been any discussion regarding norms Tim went on,

No. Frequency of use, no. There's been nothing - I think it's kind of just an unspoken thing, and prior [*to the BlackBerry*], we literally got an email, that was, "Hey, look, because people aren't getting back to people internally we expect that all AE's check their email, voice mail, in the morning and at least once at night if you're on the road to make sure you've covered all." And so, with this [*BlackBerry*], it seems very common and obvious that people are gonna understand, "Hey, look, you're accessible at all business hours with your BlackBerry." Once you're traveling, you can download and get back to people, and I think it's an unspoken expectation, that that happen.

Individuals did converge on one aspect of their initial technological frames of reference. Throughout the sales force, individuals assumed that senior management expected them to use their BlackBerry to be more connected and responsive to email. This orientation was apparent in Tim's comments and was shared by a vast majority of sales representatives. Individuals framed this expectation differently depending on the nature of their accounts and relationship with their supervisor. Some decided that connectivity would benefit their ability to serve their accounts and be a better sales representative. Others thought that it would be in direct opposition to their role and success as a sales representative. Nevertheless, an understanding that BlackBerrys equaled expectations of connectivity was widespread. In response to a question regarding why Linden chose to provide the device, Paul, a national account executive ventured,

I guess they were looking for more productivity out of their sales force. So, I guess there is an expectation that Linden has, I mean, senior management. I think that Linden views themselves as a pretty progressive company. One that is kind of on top of the latest and greatest in technology. And if they see other companies - their sales forces having them, I think they kind of see that as something they should be doing as well.

Asked if it is common for other sales people in the industry to carry BlackBerrys Paul retracted his prior statement:

You know what, I don't know. To be honest with you, I mean, I haven't seen enough salespeople in my industry have them quite frankly. So, I don't know. Other industries, obviously I see a lot more, but that's bigger companies and I think it's a pretty expensive investment to make, so, I really don't know.

Questioned whether buyers would have them, Paul agreed with others that, "No. They wouldn't, because they won't spend the money." In essence, Paul assumed that senior management at Linden associated the BlackBerry with increased productivity and that providing the device symbolized a specific position in the industry as a whole.

Before these users had a chance to explore how using a particular technology would fit into their daily work practices and enable them to project and experience a valued sense of self, they had already developed initial technological frames of reference. Such frames emerged from cultural images of the technology, observations of friends and colleagues, and the style and rhetoric they were exposed to during their initiation with the tool. Of course, in the daily attempts to perform their jobs, and enact a valued occupational identity, the relationship with the new tool quickly evolved.

Existing work practices and the BlackBerry

Regardless of number of accounts, size of accounts, sales region or product line, every individual on the sales force has one goal in common: to sell shoes (or apparel). Therefore, work practices and communication acts involved with selling are the most salient for a sense of occupational identity and concrete success in the role. An individual's sense of how using a BlackBerry would enable or constrain selling is key to understanding how they developed an initial technological frame of reference toward the device. Even at the lowest level, sales

representatives enjoy a large amount of freedom and autonomy in how they spend their time. The product of their labor boils down to one number that is visible and quantifiable. Senior Director Carol, emphasized that it is impossible to measure the job in terms of number of hours worked in a week,

I mean, you just do what you have to do to get the job done. We're all, everything we do is measurable in sales, right. It's all about hitting the numbers. That's how you're judged. So, there's no way of counting hours.

Fred, a department store senior account executive, similarly quantified his job,

You know, we're in a numbers business and if shoes don't sell, then... *[implied negative consequences]* It's not, you know, like in a service business where the success level is arbitrary. For us, it's one thing. We get numbers every day. It's a different set of parameters.

And Ron, a senior account executive who bridges key and independent accounts stressed selling as the primary goal of the job,

I'm telling you there's always another issue. We all know there are issues working with customers. But in order to create issues we have to create reasons for them to exist. Meaning you have to create the sales and business and opportunity in the first place.

Sales numbers are the bottom line for the company and the individual. In order to assist the company in the overall endeavor of selling, individual sales representatives must negotiate demands from different functions in the organization. Designers want input from the field, planners want detailed forecasting reports, and marketing wants assistance in rolling out programs. Sales people described having to constantly negotiate requests from headquarters. They must actively work to maintain their focus on their specific job of selling certain shoes to certain accounts. Dan, an account executive with over 150 accounts, depicted a continuous juggling act. Asked to elaborate on a comment about always fighting fires he explained,

Well, you just get it done as fast as you can. But there's always a fire. And you just prioritize. Like, "What is this one gonna mean? Is it a big fire? Is it a big company? Is it a big customer? Is it a big order?" If so, I gotta get this taken care of now.

It's like, this one *[referring to a specific email message]*, they're screaming really loud. They *[headquarters]* really want this information from me. They want me to do this

report. They need it this afternoon. But, for me, I'm not gonna lose any orders, even if I don't get that *[the report]* done in time. So it might have to go second.⁷¹

Let's say I go in my office and I get an email from a customer. He has to have something, or there's an order that's about to cancel. We got a shipping problem and I gotta call customer service and get this straightened out. If it means I'm gonna lose dollars I'm going to get that taken care of first.

Here's the thought process. I get an email from my boss saying he has to have this report by 10:00 a.m. Well, I mean, normally for my boss if he needs something by 10:00 a.m., that's priority. But if I'm gonna lose a twenty thousand dollar order the boss is going on the back burner. I'll send him a quick email and say, "Jack, I'm trying to save a forty thousand dollar order. I'll get it to you when I can." He understands.

Similarly, Donald, a senior account executive who sells to 4 key accounts, described prioritizing tasks in order to focus on the bottom line. In questioning the best way to organize his day Donald explicitly contrasted "communicating" with "selling." Donald is similar to others in framing electronic communication as a communication avenue specifically for dealing with colleagues within Linden rather than his accounts. These communication acts are not core to the tasks that he believed would further the goal of selling shoes. Understanding which communication acts are considered by those interacting with a new communication technology as key to success in a particular job sheds light on the process of orienting to a new mode of communication. Donald did not sense that increased access to email would enable him to sell shoes. Rather he assumed that carrying a BlackBerry would force him to direct his energies toward communication with others in the company. Therefore, prior to receiving a Blackberry he did not assume it would be a helpful tool. In Donald's words,

So, what do we want to do? Do we want to communicate all day or do we want to be task-driven? The more I stay disciplined about tasks the better it goes.

Like any other folk, I can freely admit that more than once I've gotten engrossed and lost in all of the different requests that come my way. You know, we act on people and

⁷¹ "They" refers to the sales analysis planning and forecasting group.

we get acted upon, and so if I've got peers in the organization who want A, B and C, and it needs to be done in the next 24 hours, you can become very email-driven. I try to be respectful about those requests and get those executed but at the end of the day. But then I've gotten their work done, not mine. The more I stick to the three-times-a-day rule [*checking email three times a day*], the more I succeed at selling end product. At the end of the day, I'm in sales; if I don't sell more, we got a problem.

Donald referred to the numerous requests coming from people within Linden as part of his work demands. All sales representatives balance their energy between satisfying specific accounts and addressing Linden's overall sales goals. Individuals developed an impression of how the BlackBerry would align with daily work practices based on their interpretation of how it may or may not enable their ability to sell shoes or apparel. Many assumed that carrying a BlackBerry would not help them in the practices of selling and would only increase pressure to respond to messages that they considered to be peripheral work. Further, such work often required access to software not conducive to BlackBerry use (Microsoft Excel or Power Point).

Prior to receiving the device, national accounts representative, Tim, reflected this widely shared opinion that the BlackBerry would be limited in usefulness because they would not enable sales representatives to deal with detailed forecasting reports and product materials while on the road.

We do a lot of sales analysis. Whether it be Excel spreadsheets or a lot of product things coming through to us, it would be helpful to be able to really see them [*the BlackBerry screen is too small*], I mean, that would round it out. I don't know that that's necessary for the field-based independent guy, but from a national standpoint, we are asked and challenged to do a lot of financial as well as product analysis.

Likewise, Nate made a distinction between communication and work after two months of using a BlackBerry,

A lot of our business is tied to attachments. You have an Excel file attached and you have things to work on that. So, I always go back to the laptop, because ultimately you need to circle back to the work. It's [*the BlackBerry*] good for 'communication,' but the 'work,' that has to be on a desktop or at a laptop.

Sales representatives are expected to aggregate information about their territory and feed it back to headquarters. Further, key and national account representatives integrate numerous internal functions into their selling practices. Dealing with eight key accounts, senior accounts

executive Kurt elaborated on how, as the volume of sales with specific accounts grows, so does the number of internal Linden people involved.

What you do is you monitor your sales, see if there's any problems, see if there's anything selling well that you can sell them additional product on. You've got merchandising and marketing issues, you know, there's so many things going on. Whenever you elevate people or whenever their businesses get bigger, all of a sudden, instead of just one person being involved, which is usually the rep and, to a secondary degree, maybe the regional manager, now all of a sudden you've got all these people. These touch points are created that want to be involved. And you become the contact for the business. The marketing, the advertising, the product people, are all like, "Hey, you know, we need to do this." Or, "Come on, let's set up a meeting, let's do this, let's do that." So that's what seems to happen at a point. A lot more focus is paid, attention to these accounts, on just how their business is being run. In some cases it's good, and in other cases, it's just, the account wants us to leave them alone.

Similarly, Nate portrayed his daily work practices as depending on the type of accounts he is dealing with. While every representative engages in product presentation, their ongoing relationship with accounts is different depending on an individual's role in the sales force.

According to Nate,

There is the basic part of it, which is just the product presentation. But with a key account I think other things come into play. It becomes a little bit more of a management of the business instead of, well, my sole responsibility isn't just to sell-in. I think with some of these independent accounts – and I've been on the independent rep side of things too – you may see this customer once per season, and you show them the line. And they write the order, and then you see them again the following season. Whereas with a key account, it's, you know, every week you're interacting with the buyers and interacting with the managers – or the buyers' managers I should say – the divisional managers, talking about sell-through, talking about at-once opportunities, talking about holes that are in their inventory. And I think it just becomes more of a management of a large business as opposed to a hit and run on a seasonal basis.

A number of activities involved with performing the job of sales representative go beyond presenting shoes and writing up orders. Representatives described being torn between attempts to satisfy a variety of internal expectations, often work that needs to be done in front of the computer, and maintaining an impressive travel schedule. This dynamic led to reports of frustration and tension. David's assessment of the job is a good example,

I guess what I'm saying is, they're asking some things that are not necessary or you don't have the time to do. . . I'm wearing too many hats. They want me to be the marketing expert, they want me to be able to print out all sorts of spreadsheets. They want me to be able to do PowerPoint. They want me to be able to do planning, promotions, and such. Some of that is part of the salesman's job, some of it isn't. And quite frankly, we hire planners. But we're supposed to plan our business for the year. So, I don't know what the planners are for – what are they there for? We send them our projections and then they go out and go over to – they go and project what the needs are gonna be five, six months from now, because everything is brought from overseas and China. So, more and more, we're required to try to hit the number, try to be very accurate on the number. And yet, they're the analysts. I mean, when they come out and start selling with me, then I'll start helping them. No, I mean, I am helping them. But, I mean, they don't sell – the marketing people only market. That's all they do. Analysts only plan the business. The people that work on special events, that's all they do. But the salesman somehow, is supposed to do all that and get evaluated on it, and then it's almost like the selling is like, well, you know, like an afterthought.

Therefore, those, like David, who did not see the BlackBerry as enabling communication with their accounts initially framed the device as a technology that would intensify this challenge. Sales representatives feared that carrying a BlackBerry would increase internal expectations of responsiveness while not helping them with their core activity of selling shoes. One of the purported reasons that senior officers at Linden decided that the sales force needed BlackBerrys was to allow them to stay more connected to email while on the road. However, if the emails they receive require them to sit down in front of a computer and take focused time with an Excel spreadsheet, reading that message on a BlackBerry can be an exercise in frustration rather than efficiency. As Dan describes,

I mean one thing we always complain about in the field is getting email requests for short notice stuff. 'Cause you know if you're in the office everyday you can get a short notice request and you can deal with it. When you're on the road it's different. Even if I'm in my hotel room and let's say I get there early and I got plenty of time to download and you send me a request for some complicated information. Well, maybe I didn't bring those files with me or I don't have all that stuff with me in the hotel room. It's back at the home office. I think the biggest thing we in the field get frustrated over are these complicated requests on short notice.

Ron, a senior account executive selling to key and independent accounts, also expressed concern that carrying a BlackBerry would increase his stress due to a shift in expectations. He

assumed that while the device might enable him to be aware of email on the road, it would also interfere with his main focus.

I think the stress level would go up higher for me *[if I had a BlackBerry]* because it's something that I know is there telling me that I've got more work coming in. It's something that it's not useful if you don't have it on you and I wouldn't have it on me. I'd leave it in my car. I'd leave it in my briefcase and I wouldn't look at it until I'm ready. I wouldn't change that no matter what. Because, I know that if I'm not able to dedicate 100% of my focus on where I'm actually at *[in front of the customer]*, then I'm not going to yield results. That's me. A lot of people more talented than me can do multiple things at once. I can only do one thing at a time.

Prior to receiving the BlackBerry some sales representatives framed the device as a tool to help them deal with requests on the road. Others felt that it would simply alert them to tasks that they could not accomplish on a hand held device. These individuals feared that carrying a BlackBerry would increase expectations from headquarters that they would be available, when, due to travel and time in front of accounts, they were not. Sales representatives are focused on selling shoes. How individuals felt that they could use the BlackBerry in service of that goal was open to interpretation and highly dependent on the nature of their accounts.

At the minimum, sales representatives hope to maintain current numbers and keep existing customers happy. This involves bringing in new product that sells so the customer is willing to re-invest the next season, making sure that the customer has an efficient way to 'fill in' sizes and SKU's (number assigned to each product model) if a specific shoe sells out mid-season, and often helping with product display and marketing. Beyond the expectation that current numbers are maintained, the goal is to consistently find new opportunities to grow current accounts and, if you are an independent sales representative, find new doors.

Ron was clear about where his priorities lay: getting new business and making sure current business is operational.

I really try to force myself to go out and pioneer for new business from people, places that I'm not currently selling in. So there's still cold calling if you want to call it that. But no one really has not heard of Linden in the shoe business. There are places certainly that don't carry our product and I try to go out and find out why they aren't.

The integral piece is really customer service. At the end of the day it's about shipping the product that you have on an order. So as long as you keep that priority No. 1 in the work I've found you have to have a pretty intimate relationship with your customer service representatives and just making sure that anything that you communicated through e-mail or through voice mail the night before or the afternoon before that you didn't hear back from you're following up and that's obviously how you accomplish it, through cell phone when you're on the road. Just making sure that that stuff is always the most important part of the job is shipping the orders that you've booked.

Nate is similar to Ron in his continued focus on shipping and selling product. However, for someone who only sells to national accounts, creating new business opportunities has less to do with 'cold-calling' accounts than figuring out how to meet the needs of large accounts. As Nate described,

The ultimate challenge is to continually find opportunities for business. So I guess there's two ways to look at it. There's, you know, at-once opportunities. What's good right now? What can I do right now to enhance my business that a), matches up to supply that we currently own, or b), what can I do to plan for what's selling right now, to kinda take that next step? So I would say the 'at-once' business is always present. You talk to any salesperson and they're always gonna say, "What can I sell today? What can I ship today?" And so that's always on my mind.

Where sales representatives find opportunities for business depends on the nature of their customers. Likewise, individual communication practices were highly dependent on account preferences. If an account does not communicate by email, sending them messages through a BlackBerry does not serve them. On the other hand, if an account is regularly on email and operates under a tight schedule, the ability to access email when away from the home office or hotel room might be a substantial benefit. Not surprisingly, sales representatives developed different assumptions regarding the role that the BlackBerry might play in providing customer service depending on the nature of their accounts.

For example, asked whether she thought that having a BlackBerry would affect her relationship with accounts, Tabitha, an independent account executive, said "No, no. See, the nature of my account[s] being independent based, a lot of them don't even have, say, computerized systems in their stores. So, for them to be on email, not gonna happen." On the other hand, Fred, a senior account executive, was optimistic about the BlackBerry because of the potential to serve the communication needs of his department store accounts,

They're becoming much, much more – they want to do more and more email. It's easier. You know, I think, one of the things about email that people like myself, and customers, and people who have been raised using the phone, have discovered, is that email gives you a much better time flexibility. A lot of my customers, you know, the phone really ties up a lot of time which they don't want to spend. So, they prefer an email that they can respond to perhaps after hours or at their leisure. And so my customers definitely prefer email.

Similarly, senior independent account executive Geoff described how, prior to the BlackBerry, he was struggling to find a balance between responding to emails and traveling around selling shoes.

You know, I have to put myself in other people's shoes. As a store buyer, that buyer is sitting at their desk looking at a computer screen for probably 80 percent of their day. If they type me a message, they want an answer. If I don't respond to them in that day, very well they could give the business to another brand, or it could upset them. If I get to a situation where I know I'm not gonna have access to email, I try to put the out-of-office assistant on, but I just can't do that all the time because I travel so much it would be on all the time. I'd have to figure a way out to get back to them. I really try hard at that. Selling shoes to customers is probably 50 or 60 percent of my job, and the other 40 or 50 percent of my job, depending on the time of the year, is also working at my computer and sending responses and calling people on the phone.

Given the importance of communicating with accounts, sales representatives spend a great deal of time figuring out how to best get in touch with customers. Harry, an independent sales executive, described having to figure out the differences in communication preferences among his independent accounts and the best way to get their attention, motivate response, and build a more interpersonal relationship.

Most of my communication with the accounts directly is through phone. Secondary would be email or fax. Occasionally I write a letter; that seems to be rare. I do some mailings and that sort of thing. Sometimes, you know, these accounts – you just have to figure out what they're gonna respond to. I mean, a lot of times, like, it's a distraction for them to get a phone call if they're not expecting it. Where other people just need to be prodded on the phone, just to kind of, get anything. They'll say, "I appreciate that, kind of reminded me to do a few things." Where, like I said, other people will prefer to get an email because, we know they're at their desk, that will prompt them to respond.

Faxes are a great way to get in touch with them. It all depends on what type of information you're trying to deliver as well. A lot of times I'm just calling people to say, "Hello," see how the business is going, you know, casual. You can't get that through an

email or a fax. You wanna kind of get to that conversation where you can get into, you know, things that are going on for them personally that helps, but also things going on within their business. And you can get a lot more out of a phone call. I mean, if you send a fax, it's kind of end of story. They will respond or they won't respond unless you follow up with a phone call or what have you.

Similarly, Fred outlined how the changing organizational structure of department stores was encouraging new communication practices. Fred would love to be able to develop long term relationships and communicate by telephone with his accounts, but he is forced to do most communication by email,

Where at one time every *[major department store]* bought separately, today one buyer buys for 21 stores. He doesn't have time. They don't have time. So where you used to be able to pick up the phone and get a hold of the buyer/manager on a floor. His only responsibility was that one store. He had the time. You had the time. Those days are gone. So in order to accommodate our customers – I don't really know if I have a choice as to how to communicate with customers. I think it's just a matter of you've gotta do what the customer wants. So I mean I'm old school, you'd love to get on the phone, tell people about the family, tell a few jokes, but unfortunately that's not the way it's done.

Fred was reluctant to cede the development of sales relationships to email communication and expressed ambivalence about receiving a BlackBerry. However, given the nature of his accounts, he realized that the BlackBerry might enable key communication acts. Sales representatives like Fred framed the BlackBerry as a tool that might help streamline current communication patterns. Similarly, Arnold, an account executive in charge of key "fashion" accounts, believed that having a BlackBerry would enable him to operate at a level respected by his accounts.

You can have BlackBerry envy, but that's not what is going on. What I don't have, that some of these guys need, is accessibility. They like to have you accessible. A lot of these people are very impatient. You know, fashion is quick; we're in a fashion business and a lot of people want decisions made very quickly, or at least to talk to somebody who knows how to help make the decision. It's become tough. I'll give you a perfect example. I made an appointment yesterday, a tentative appointment, with an influencer in the marketplace, to meet me at the MAGIC show, a tradeshow next week, in Vegas. He would like to know what our booth number is there. I don't have access to that information. Now, I tried to get somebody on the phone. Couldn't get anybody in *[headquarters]*; left a voicemail. Then, when I got back home, I had written down a note and I wrote an email to that person. That person is out of the office. Not only do I not have resolution, but its tomorrow already – Wednesday – and I didn't get back to the

guy, who I'm supposed to be meeting next week. That's okay; he'll understand, but it just makes me look, it's less – I'm a little slow in his world, taking more time.

Unlike many of his colleagues, Arnold initially framed the BlackBerry as providing access to valuable information. He assumed that this accessibility would bring his daily work practices and key communication acts in line with the needs of his key customers. For those sales representatives who thought of email as a medium reserved for dealing with their managers and requests from headquarters the BlackBerry was seen as a potential burden. Others, who saw the BlackBerry as potentially useful for communicating with customers, were far more optimistic.

The sales team is mobile and dispersed. Although people work in front of the computer, either at a home office or on the road in hotel rooms, the core practices of their job take place in front of customers. All saw the BlackBerry as a tool to maintain access to email while on the road. If sales representatives sensed that such access to email would help them sell or communicate with accounts, they framed the device positively as enabling existing work practices. If an individual's accounts did not communicate through email, the BlackBerry was seen as unnecessary, if not detrimental to work practices. Additionally, whether or not a sales representative welcomed what they interpreted to be increased exposure to email depended upon whether or not they saw themselves as part of "managing a business" with other Linden colleagues or dealing independently with numerous accounts. Maintaining autonomy, building relationships, and closing sales are key aspects of the sales occupational identity. How their sense of the BlackBerry played into the desire to accomplish these goals through work practices is the third key to understanding how individuals develop orienting frames of reference.

Occupational identity and the BlackBerry

Individually motivated

Working out of their homes, sales representatives desire individual autonomy, flexibility, and freedom. This expectation is core to their occupational identity as field-based sales representatives. Many talked about their strong sense of personal drive and direction. Sales

people keep long hours and travel extensively. Regardless of position in the sales force, individuals emphasized how much they relish “freedom.” Many emphasized self-driven motivation as well. According to key account executive Donald,

One of the beauties is it's a very flexible existence, and that's nice, but I think when you're in the field you have to be disciplined. Distractions are plenty, and if you're ever gonna get anything accomplished you need to apply yourself. I try to be pretty disciplined.

Similarly, Linda, a field service representative, described her occupation at Linden as follows,

It's a good company to work for. I love the job that I have. I've worked in New York. I've worked in buying offices. I've done all this stuff and for me it's a great job because it gives me independence. I cannot stand somebody breathing down my neck, looking over my shoulder, asking me why I did a semicolon instead of a comma, and I've had that. Let me do my job. I know what I'm doing. And my boss lives in Cleveland. It's perfect. Leave me alone.

Ken, senior account executive selling to independent key accounts made a distinction between working in the field and a “corporate environment.” Asked to elaborate on the appeal of working in the field he mimicked the language of Donald and Linda; “The freedom. It's still labor intensive, but I like flexibility and freedom. I don't have a short attention span, but I don't like to be cooped up in one place for too long.” And Ron, responsible for numerous independent accounts, asserted that the need for freedom is a key part of the position.

It always has been for me and I would imagine you'd get 10 out of 10, a perfect score, if you asked everyone. It's part of the allure and part of, I think, what makes or doesn't make someone successful in this type of job.

Individual opinions about the BlackBerry were often based on assumptions about how carrying the device might affect the experience of flexibility and freedom. Prior to receiving the device, Paul, a senior account executive in charge of six key accounts sheepishly admitted that he had thought about how having a BlackBerry might enable him to act as a free agent. In this statement Paul considered how the BlackBerry might affect his ability to do the job but also *be* the kind of salesperson he wants to be.

Let's say that I'm a salesman and I work at home. What if I want to go out and play golf. Let's say I'm on the golf course. Now, if I were on the golf course prior, I had my cell phone, but it didn't have email or access and they're requesting some kind of response,

and they're not calling me on my cell, they're sending me emails. And they're only calling me on my cell phone if it's an absolute emergency. But they're sending me emails, "Did you get an update on this?" "Did you get that?" And when you have the BlackBerry, you're really there. They don't know where you are. *[laugh]* I think there's some reality to that, this gives you the ability to really be offsite, not working and still be connected and that way you can get your job done and not be necessarily home-based or office-based.

Relationship builders

Paul's comment highlights the other core element of the occupational identity shared by sales people at Linden - an orientation toward building relationships and creating connections. Sales representatives felt that being good at their job required a personable nature and belief in the product. Working in a "fashion" industry where competition is intense and the product is considered a luxury good, sales representatives can face a difficult marketplace. Many assumed that the ability to build relationships in this climate was crucial for creating a shared vision with their accounts. According to Donald,

It's a very intimate business in a lot of ways in that we're trying to make footwear and apparel and gear that is function-driven but fashion-first. There are a number of choices every retailer has to make about who it is they wish to try to draw as consumers and how they are going to service them. So that often is an editorial job, as well. There's no lack of competition in the world, whether it's apparel, gear, or footwear. So in any one given day, not only am I calling and sending email and showing up for appointments, but so is the rest of the industry. You have to be selective about who it is that you're going to do business with at retail. So this is also very much a competition; a competition to be heard, a competition to effectively gather the consumers' imagination and do business. We try to work with our retail partners as best we can to form a partnership so that we're making the right product in the right colors, with the right deliveries, giving them what they need to help make their business. So it really has to be a partnership.

Numerous sales representatives described their job as an endeavor to develop trust and build relationships with accounts. Many individuals also asserted that these relationships give Linden product an edge. Sales representatives portrayed smaller accounts as making subjective choices about how to display the product and the amount of wall space dedicated to each company. Therefore, many equated a good relationship with the owner or manager of the store with better product representation. Others asserted that larger accounts are more open to marketing efforts if buyers enjoy a good relationship with their Linden representative.

Interpersonal skills are difficult to teach or quantify. Therefore, Linden sales representatives internalized relational activity as an aspect of self rather than as a job requirement. For example, Ken correlated his affinity for his job with a background in psychology.

Not that I've handed my resume out lately, but every once in awhile people ask, "What'd you major in in school?" I'll say, "Oh, I was a psych major." And they're like, "And you're in sales?" I'm like, "How can you not see the correlation?" It's about people, it really is. It's about relationships, understanding people and their habits and patterns. One of the first things I do whenever I meet somebody, or I go to someone's office, is I look at the pictures that they have. What interests them? What are their hobbies? Do they have dogs? Do they have kids? What can I ask them about that's gonna make them happy and feel good and get them in a mood where they're gonna want to sit down and have a conversation with me? It's about business.

Although Ken was in charge of seven key accounts and Doug is responsible for close to 100, the two had similar ideas about the importance of building relationships in making sales. As Doug, described,

I'm a big relationship guy. I'm big on remembering what this guy likes to talk about, what his interests are; I try to be a good listener. Before I just start selling shoes, I query him a little bit. I want him to feel like I'm his friend, so I ask him the question that puts them at ease. Like one guy's a NASCAR fan, I'd rather have a root canal without Novocain than talk about NASCAR, but there's a few guys that are NASCAR fans, so you talk a little bit about that. So, you talk about whatever they like, and right away, that puts them at ease.

Doug continued,

It's about building relationships, number one. No amount of technology will replace the relationship building between the rep and the customer. I happen to think, you know, that I have a lot of integrity and honesty, and I built up relationships over the years. And I'm gonna make the guy like me, but I'm gonna sincerely make him like me. I'm not slick, I'm not phony. You're gonna like me. I find out their interests, I find out their birthday, I find out, you know, what they like to talk about. I find out what they don't like to talk about. I know all that stuff. . . I build the relationships, and if they trust you and you're able to sell, make good solid presentations.

Seeing oneself as capable of building relationships is core to the identity of a salesperson. It is also a source of frustration for those who felt that different communication media disrupted their ability to build relationships. According to Harry, an independent account executive,

Relationships; sales is all about relationships. You know, and it's difficult to develop a lot of that through, you know, certainly email or phone. It's a little more challenging. I find that you really have to work harder on a phone in some ways.

I mean, because you're just kind of – you have to make an impression with a phone call and get them to follow up. Versus face to face, you know, is just a lot easier for them to, you know, hang up and walk away. You, you really want to kind of work harder to develop that relationship, so they will respond to your phone call and just kind of work accordingly.

Occupational identity, product line, and the BlackBerry⁷²

Linden sales representatives shared an occupational identity as self driven workers who are personable relationship builders. In operating to further this sense of self they did not develop a converging sense about the relationship between being a sales representative and using a BlackBerry. Some sales representatives had an impression that carrying and using a BlackBerry would further their overall desire to appear more technologically savvy. Others explicitly rejected a correlation between technology and sales. These individuals felt that such tools would get in the way of performing the job and mask the identity traits necessary to be a successful sales representative.

For those sales representatives with a 'pro-technology' perspective, BlackBerrys were initially seen as a tool that would enable them to enact the image of savvy sales representative.⁷³ Nate was one of the few account executives who unconditionally wanted a BlackBerry from the start. He sells a "fashion forward" line to key accounts and felt that the tool

⁷² At the time of this study Linden sales representatives sold one of three distinct product lines: a 'fashion forward' line, an industrial line, and a standard line. Individual representatives sell only one line unless they officially change jobs within the organization.

⁷³ The 'pro technology' sales representatives were not distinguishable by age. The three examples used in this section were 32, 39 and 40 at the time of interview. Rather, the nature of the product they were selling (the 'fashion forward' line) appeared to be the most significant explanatory variable for which sales representatives were initially positive about the BlackBerry as a device and 'technology' as a generalized concept.

would help him project the identity of “cutting edge” salesman in a manner that reflected the image of his product line. He described,

I think if there’s one rub with what we do, and I’ll relate this back to product because it’s the easiest way for people internally to see the relation of it. We’re innovative when it comes to product, and we are cutting edge. You know, we have the best product available out in the marketplace. So I think the tools that we use to go to market should equal the product, and so I think when, you know – I don’t ever wanna bring a knife to a gunfight. So with me, technology is something that can be used to our benefit.

Arnold, also a senior account executive selling the ‘fashion forward’ product, was similarly concerned that he should project an image aligned with the “influencers” he hoped to establish communication with. Therefore, Arnold initially framed the BlackBerry as a device that would enable him to play in the same communication field as his key accounts. Arnold wanted to appear responsive and available. But, beyond the actual communication practices, his words implied that carrying the device would enable him to project a symbolic image of “influencer.” Prior to receiving the device Arnold said,

I think BlackBerry is a great technology. It looks like it’s great. I don’t know. First-hand, I can’t tell you, but second-hand, a lot of our accounts, a lot of the cutting-edge accounts, the accounts who are the influencers. This is the part that’s tough, too. The influencers use it. They use it so they are in touch with people 24 hours a day, seven days a week.

Asked who he thought the “influencers” were in touch with so pervasively, Arnold goes on,

Other influencers, other decision-makers, people at other companies, contact lists; handing off one contact to the next.

In this same vein, Paul, embraced the BlackBerry for the “cool” factor. According to Paul, “I just think it’s kind of cool. I like to have the latest technology, and I think it’s fun.”

For these individuals, “technology” as an image and a symbol had become an aspect of their identity as salespeople. For this segment of the sales force, sales representatives saw themselves as not only autonomous and personable but also connected and technologically savvy. About half the interviewees made a point of emphasizing that they were not “technophobes.” These individuals related a specific communication device (the BlackBerry) to a broader desire to enact the identity of someone engaged with the concept of “technology.” These comments revealed that in order to be taken seriously in certain segments of the market,

these sales representatives felt that they must appear “cutting edge.” They felt that carrying a BlackBerry could help sales regardless of whether or how the salesperson actually used the device to enhance communication.

From the opposite perspective, Doug, who sells a more industrial line of shoes to independent accounts, derided the emphasis on technology as stripping away the skills required to actually sell. Doug grouped the BlackBerry with diverse types of “technology” including PowerPoint presentations and Excel spreadsheets. He assumed that the device would feed into a mentality that would take away from the core skills (and identity) of doing the job. Frustrated with senior management’s emphasis on PowerPoint presentations, Doug explained,

He [*senior manager*] thinks everybody needs a deck to present. You have to have a 47 page PowerPoint deck. And again, if you go through any of these Dale Carnegie things - really, the more I read about, and I read the occasional Harvard Business Review or whatever - they’re talking about how this stuff is so over-rated, and how you have to get somebody’s attention in the first 30 or 60 seconds, when you’re presenting. And these 42 page decks, I mean, the guys [*buyers*] are – they’ll tell you off – you know, they will actually take you to the side and say, “Don’t do this again.” But you’re forced to do that, because the management team, sitting up in the ivory tower is convinced that this is the way to go. And no disrespect at all intended, but these - again, we’re only talking about sales now – but these business-law-MBA guys, they just don’t get it. They think it’s all about, you know, crunching numbers and doing spreadsheets, all of this analytical stuff. And it just gets in the way.

Ron, an independent account executive selling the standard line, likewise related technologies like the BlackBerry to a desire by management to make the occupation into something it isn’t. Ron explicitly felt that technology is not required to do the job well. In fact, he ventured that too much connection might undermine his contribution to the company.

It’s just a gut feeling that – the Blackberrys are an example. It’s a great piece of technology. I’m not knocking the technology. I just don’t think – we’re not doctors. We’re not solving anything that’s so critical. We’re not politicians. We’re just selling shoes and although it’s a big deal and it’s an important job and so on and so on I don’t think personally that we have to be in constant communication. In fact, feeling the sense of kind of being on your own, managing your own relationships, your own destination for the day without interference maybe from the company allows you to be more profitable for the company.

Similarly, Carol, a director of key accounts in the standard line, begrudgingly accepted the BlackBerry with a caveat that, like Ron, she refused to make the device into more than it is. According to Carol,

Well, it [BlackBerry] should be a little bit more efficient. But, my basic rule is that there's no such thing as a shoe emergency. So you know, if I were in a different business, I might be, like, really panicked. But, you know, it'll get done. I just don't panic over emails. I don't stress over it. Maybe ten years ago I would have. But, you know, it is what it is. They're just shoes. It's a business. It looks the same today as it did five years ago. You just have to keep plugging away and get through the day. There's absolutely nothing that is going to cause trauma, even though people think it's traumatic. There's big problems in the world. I can't let myself go crazy over a size 12.

For these individuals, “technology” as a concept implied a force that is bringing an unwelcome change to both the experience and identity of being a salesperson. Geoff, a senior account executive selling the standard line to numerous independent accounts, related his opinion of the BlackBerry to shifts in general society.

You know, we've just become too much of an instant society that nothing can wait, everything's gotta have an answer. Sometimes we gotta remember we have to focus on what we're trying to do first. I'm guilty of it, too. Here I am, I'm talking to you and I'm typing emails –

Such differences in understandings of “technology” as a whole (often discussed in reference to the BlackBerry) reveal that individuals experienced their daily work practices and occupational identity differently within the Linden sales force. Given this variation, individuals created divergent ideas about how the BlackBerry would accommodate to work practices and occupational identity. Unlike Linden attorneys, they did not initially converge on a shared technological frame of reference.

Diverging initial technological frames of reference

The Linden sales team was divided in their opinions of the BlackBerry prior to receiving the device and in the first few months of use. Individual sales representatives at Linden shared different assumptions as to why they were given a BlackBerry and whether or not they were expected to keep the device. They carried divergent ideas about what the BlackBerry implied as

a symbolic object, and how it might fit into their work practices and sense of self. They sold different lines of product to different types of accounts. Their understandings of these relationships affected how they assumed that carrying a BlackBerry would be interpreted by their core communication partners.

Representing one extreme, Sam, a senior account executive selling to key accounts and department stores, initially felt that using a BlackBerry would dramatically alter his ability to get his job done. Sam feared that the device would engender unrealistic expectations of connectivity. Asked to elaborate on his immediate reaction to hearing, less than a week prior, that he was slated to receive a BlackBerry Sam related,

Just, oh crap. There goes my last escape. I'm never going to have any time to myself. Now, as I'm driving down the highway I'm supposed to be downloading stuff out of my BlackBerry, reading emails and keeping track -- causing the sirens to come after me.

On the other end of the spectrum, Paul, described his first reaction to hearing the news that he was going to receive a BlackBerry,

I was very excited, I had wanted one for a long time. In fact, I was going to go and get one on my own, but I kind of thought that we might get one. It would be more of a thing if I went and got my own, so, I just kind of waited for a couple of months. But I always said I want it. I mean, I always feel like if I have the email with me, then I'm completely connected. You know the cell phone is one thing, but you need - so much of my business is done via email that without it, you just weren't as - you weren't taking advantage of what is out there as much as you could. So, I was really very excited to see that we were gonna get it.

Linden attorneys share proximity, work practice and overlapping ideas of how to enact their occupational identity. As such, they developed similar expectations about the uses, meanings and affordances of a new mode of communication. Divergent on each of these aligning elements, the sales force developed widely different technological frames of reference and initial patterns of use. Although individuals had a sense that the sales force had not developed a shared understanding of the device, they were not even aligned in terms of knowing who thought what. According to Annie, an account executive in charge of over 100 accounts,

A lot of people don't want them [*BlackBerrys*]. Because the people who have bigger accounts - I travel quite a bit, but they don't. They're home every single night, they don't

really have to have 'em. If they were at a meeting, every now and then they might have the need to use one. But they don't travel as much and they're probably 'gonna say that they don't want them. That maybe they don't really like computers, like computers total. So maybe they have to have a computer, but a lot of people are just kind of old school, they do everything by phone where I do most everything by computer.

This quote is interesting because both Nate and Kurt quoted earlier related the size of their accounts to their desire for a BlackBerry. Annie, on the other hand assumed that those with big accounts might not want a BlackBerry and her role as an independent sales representative puts her in a position to want the device. Each party is assuming that others would reject the device, and each presented the size of their accounts as reason for their assumption.

Such divergent frames of reference within one occupational group highlight an aspect of the framing process not explored by Orlikowski and Gash. These authors focus on converging technological frames of reference among groups within an organization. However, convergence is not inevitable. The divergent frames that initially developed in Linden's sales force reflected and perpetuated differences among individual sales representatives. The structural and social climate in the Linden sales force enabled such differences. Individuals reported having regular cell phone calls with friends across the sales force. They engaged in ongoing email communication with immediate colleagues within their sales 'team' and supporting functions within Linden (e.g. marketing, financial planning and customer service). Still, they did not work in physical proximity to these colleagues. They did not face them each morning and therefore did not have the same opportunity to develop implicit shared understandings of a new technology. This structural environment likely accounted for some of the lack of convergence regarding initial frames. The occupational identity of sales representatives - as self-driven autonomous workers who determine their own schedule and maintain their own relationships with customers - further reinforced this divergence.

Initial divergent frames informed emerging practices and the evolving social context. Individuals in Linden sales did not rely heavily on the example of peers in initially establishing when, where and how they were going to interact with the device. This led to a social environment where individuals reported feeling that they had the freedom to explore the device on their own terms. Five sales representatives reported not taking it out of the box for

weeks to months. Such diversity in terms of individual approach to the BlackBerry set the stage for a social environment that embraced a norm of difference rather than converged on specific expectations of 'typical' patterns of BlackBerry use.

Experiencing BlackBerrys over time: Linden U.S. field-based sales force

Unlike the legal team, many in Linden's mobile sales force were initially suspicious of the BlackBerry. People diverged in their sense of what the device implied and how they felt it would align with their daily work practices and sense of self. Individual technological frames of reference did not converge and individuals often misjudged how colleagues interpreted the device. As previously displayed in Table 3, initial opinions about the BlackBerry covered a spectrum, with the majority of sales representatives holding ambivalent, if not overtly negative, initial impressions of what the BlackBerry would mean for daily life.

Given such divergent and relatively negative initial frames within the group, it is interesting that by the end of my stay at Linden, sales representatives shared a generally convergent and positive impression of their BlackBerrys. Additionally, a vast majority described tangible personal benefits resulting from their increased capacity to handle email.

Many Linden sales representatives developed a negative initial impression of the BlackBerry. The same work practices and occupational identity that many sensed to be in tension with the capacity for hand-held mobile email set in motion a social dynamic that enabled individuals to share a positive experience of the device over time. Individuals on the sales force moved from divergent and ambivalent frames to a shared and generally optimistic view of the BlackBerry. On the road most days of the week, sales representatives started to use the BlackBerry to keep up with email during traditional working hours. They discovered that they could integrate email throughout the day without detracting from time in front of the customer. As such, they reported saving significant amounts of time that was previously spent on email in the evening. As experienced boundary setters, many individuals chose to create a clear break from the

BlackBerry on evenings and weekends. Most significantly, the group did not develop expanded expectations regarding 'off hours' accessibility that challenged the individual choice to disconnect. See Appendix 9 to trace this progression via the experience of one Linden account executive.

Occupational identity, work practices, and BlackBerry use

Members of the sales team traveled extensively. Everyone was mobile, busy and on the go. Roberta, a department store senior account executive, was initially hesitant about how the BlackBerry would affect her life on the road. Just after receiving the email that the device was in the mail she said that her first reaction to the news was,

Well, I just felt like, oh, no. Another gadget to keep me tied. Sometimes I'm on the train and you've got the cell phone going, the computer going. You've got your paperwork going. It's like, when do I get some peace? I often think about that, that you need to have time where you can read a paper or zone out. So, I have mixed emotions because maybe I could leave my computer home and not travel with the heavy computer and just check the BlackBerry. But then you can't really do, if there's an urgent something that needs to be done, you can't do it anyway from a BlackBerry. So, it's really just reading and replying and replying. So, I don't know. Does it make it more complicated? I don't know. We'll find out.

A year and a half into using the device she discussed the best aspect of the BlackBerry in terms that echo her initial hesitancy. In the intervening months she decided that connectivity via the BlackBerry was a blessing rather than a curse. According to Roberta, "I think it's the greatest thing in the world. It allows you to be in contact and be on the go, which is so often – this is what people's jobs are. I mean, I'm constantly running. I'm in sales." Asked when she does not use the device, her answer highlighted how the tool aligned with her daily work patterns.

Roberta said that she doesn't use her BlackBerry:

When I'm out working in the field. Or in the home office. So really, it's for the transition times. So, when I leave here [NY showroom], whatever time it is, I'll be walking down the street checking it, on the train checking it, before I wrap up for the day, check and make sure, and the same thing on the way in. Mostly transition periods. If I'm driving, two or three hour drive sometimes, I'm constantly just checking, viewing [Laughter].

Nate, a senior account executive who handled key accounts, was one of the most vocal initial supporters of the BlackBerry. Nate looked forward to having the ability to fit email communication into the micro moments of daily life and assumed the device would have universal appeal throughout the sales force. Therefore, it is not surprising that after two months of using the device Nate asserted,

Overall, I think people really like it. Because as a sales guy, we have a lot of time where we're sitting in a waiting room, or rental car, or an airport, or all that kind of stuff where the laptop is a pain in the neck. Battery runs out on it, wireless technology isn't always where it should be. You can't always get a line, you can't get your email, you can't always get, quote unquote, "In the know" about what's going on during your day, and so the BlackBerry provides that opportunity to stay in touch without having to boot up your laptop.

Nate was one of a minority of Linden sales representatives who developed an unequivocally positive technological frame of reference prior to receiving the device. His comment about use during 'down time' ended up to be a widely shared and positive experience among sales representatives throughout the sales force. While several of Nate's colleagues expressed initial hesitation that the BlackBerry would unproductively cut into time on the road, they all found that they were able to use their BlackBerrys to enable useful communication while traveling. Further, the BlackBerry did not disrupt, and often enhanced, overarching goals.

In sales, core communication acts are with customers. Many in the sales team initially assumed that carrying a BlackBerry would detract from their ability to build and maintain relationships with their accounts. They argued that they would never check a BlackBerry in front of an actual customer and they did not want email interlocutors to expect them to be available during this time. Further, many felt that the practices involved in making a deal or selling the merits of a product were not conducive to email. They did not expect ease of sending and receiving email messages to replace what they considered to be more personal forms of communication. These initial impressions of the limits of email communication did not change. Sales representatives continued to focus on developing relationships with accounts via face to face or telephone interaction when at all possible. After over a year with the device,

David, a key account representative, emphasized that his BlackBerry does not enable him to actually *sell* shoes.

You're not selling on the BlackBerry. You may be selling a point, or an issue, but you're not selling the shoe via either one [*phone or email*]. Selling is personal. So, that's not happening. If you were really trying to sell a point or driving something hard, if we were having an issue, I can promise you, I'm doing that kind of communication by phone, not by email.

While continuing to make the distinction between sending emails and selling shoes, sales representatives soon discovered that the BlackBerry was ideal for sending short emails that fostered smooth transactions with customers. Even the most initially resistant individuals enjoyed this capacity. Numerous sales representatives described how the ability to address account issues on the spot via their BlackBerry enabled them to distinguish themselves from the representatives from other product lines as particularly competent and efficient. A quick message to a customer service representative at headquarters could answer questions that came up during the visit - ship dates, the progress of orders, issues with specific shoe styles and so forth. An email to their manager could lead to immediate written approval to buy back shoes that weren't selling, offer promotional deals to accounts, or guarantee a ship date.

For these types of communication acts, people up and down the sales hierarchy discovered that the BlackBerry allowed them to efficiently address customer needs on site. As such, the BlackBerry did not damage, and often improved, relationships with accounts. Sales representatives continued to be conscientious about not glancing at the BlackBerry to check email indiscriminately throughout an account visit. However, by using the tool in a specific and obvious manner in front of accounts, they were able to project an image of attentive and efficient sales representative. Often, this symbolic gesture was accompanied by the receipt of a message that facilitated a concrete transaction at hand. Numerous exchanges were often related in detail during interviews. I observed two such episodes while accompanying sales representatives on account visits. By addressing customer issues on site, sales representatives felt they could reduce turnaround time, increase customer satisfaction and focus the time they spent in front of the computer dealing with more substantial email messages such as developing forecasting reports and strategy updates.

For example, Linda, a field service representative, described how BlackBerry communication enabled her to get answers to customer questions on-site. She found that it was often difficult to get her Account Executives on the phone but,

If there is an issue in the stores I can send out an email [*to my account executive*] immediately and give them answers right away. In the past I would have to come back, type out an [email], wait for an answer, maybe get back to the store the next day as opposed to just being able to take care of it right away.

Similarly, independent account executive, Dan, discovered soon after receiving his BlackBerry that the device allowed him to communicate with his boss in a manner that was convenient for both parties. Dan related how these new communication practices increased his ability to serve his customers,

So, he's on the road all the time. Let's say he's on the road right now and I need to get in touch with him and he's in the middle of a meeting. I can leave him a voicemail, but I've noticed if I send him an email he might peek down at the BlackBerry, respond, and send it back. And, a lot of times the response I need has to be emailed because I need his approval for something and it's his written approval or email approval. And so, before I had to wait for him to get back to his hotel room at night to download the answer. Now he's walking from one meeting, he's sitting in the car with another sales rep going to another meeting. He's checking his BlackBerry. He approves it and it's taken care of. Fantastic.

Ron, a senior account executive for key and independent accounts, was initially pessimistic about carrying a BlackBerry. He foresaw the device as distracting from his focus on customers while traveling to accounts. After carrying the device for three years Ron has shifted his perspective on the relationship between BlackBerry use and customer service. Ron chose to keep the BlackBerry in the car when with accounts but has learned to strategically retrieve the device in order to enhance customer service. According to Ron,

I think about it [*using the BlackBerry*] more on a daily basis more than I used to. I try to quickly solve those situations and respond to things throughout the day, and I've realized that a lot of positive things can happen with the BlackBerry. Let's say I'm at a customer and they ask, can these boxes be returned? I can get the BlackBerry out and type a quick note to my CS [*customer service representative*], and she will either call or write me back while I'm in the store. Or, it could be marketing too, that kind of thing. So, that is positive. The customers appreciate that, they know you're making some more effort, paying attention to the business in a different way.

Jim, a senior director, shared similar stories about BlackBerry use from the perspective of management. After a year of use he found the BlackBerry particularly useful because,

You're waiting in any kind of situation, personal/professional, and you have the ability to check, and access, and communicate very quickly, and give quick answers. I pride myself on trying to get back to my team as quickly as possible - out of respect to them and to drive business. And, so, this is a tremendous tool for me. Where it maybe took an hour before *[to get back to someone]*, now it takes a minute. And so they don't have to wait, so it doesn't slow them down. To me that's one of the biggest values in it. It's also a huge time saver for me in that I'm able to multi-task and get things done while I'm traveling, while I'm moving, while I'm down. And so it generates for me positive time in my life.

Jack, another senior director, reported a similar experience with his BlackBerry. After three and a half years with the device he wrote in response to an email survey that the most useful aspect of carrying the BlackBerry was, "Staying on top of requests where I need to approve something. I approve it immediately rather than seeing it for the first time in my hotel room that evening."

Donald, a senior key account executive, (and initially ambivalent BlackBerry user) found that after using the device for three years it continued to prove valuable for answering customer questions and organizing his schedule. Donald raved in an email that,

The Blackberry has aided my external relationships - again efficiency has proven to be critically important. Everyone, EVERYONE, likes to get answers to their question in a simple, quick, straightforward manner. Blackberry has aided that. The calendar within it has kept me organized. I can make future appointments while in the presence of an account without having to ask for a day's patience. As a result, I get many of the choice appointments I want because there is no delay. As a result, first mover advantage occurs as it relates to market appointments, line appointments etc.

The BlackBerry mediated communication practices described above center around getting needed information into a bounded temporal and physical location. Colleagues within Linden used the BlackBerry to email one another in order to augment and improve face to face interactions with customers. Some sales representatives also found that carrying a BlackBerry helped them stay in direct contact with email savvy customers. Doug, Joe, Tabitha and Roberta represented the diversity of how account executives communicated with customers via email on the BlackBerry. Though all were senior account executives, the nature of their accounts varied widely. Doug handled upwards of 70 independent accounts selling an industrial shoe

product. Doug became generally positive about his BlackBerry, though he continued to see mobile email communication to be of limited use. After three years of with the device, he viewed the device as a nonessential, if convenient, communication medium. Doug said,

The BlackBerry itself is more of a tool, not so much for communicating with the customers as returning emails to Linden. There are customers that do send me an email when I'm on the road and have my BlackBerry. And I do respond to them. But it happens maybe three times a week that I'll get a message from an account via email. I still get the majority of them on my phone or cell phone. ... The cell phone is with me always. To be honest, it's like an umbilical cord. In my opinion the cell phone will always supersede the BlackBerry. But then, the business isn't so sophisticated that -- the sales men on the road selling work boots, why would you wanna be communicating by the BlackBerry?

Roberta, on the other hand, is trying to keep herself on the radar screen of buyers at a large department store where email is increasingly a preferred form of communication. After a year and a half with the BlackBerry she said,

With the customers, it's important to still be in touch with them. I have to say, they seem to be emailing more than ever before. So, having the BlackBerry has only even helped in that, as far as keeping the correspondences open, or flowing, because everybody's just so busy now. It's insane. This world is just insane. I work with the department stores, so, they're overwhelmed. It's easier for them even to just shoot an email back. Even if I do leave a phone message, I'll find that an email will come back. So the BlackBerry has helped as far as keeping me in the loop while I'm on the road.

On the extreme end of email oriented accounts was Joe. Joe sells the most fashion forward product to seven independent key accounts in a major city. After a year and a half of use Joe described his BlackBerry as helping him to keep pace with his particular communication partners. According to Joe,

I have key accounts. All of them are on e-mail. Only one is it not their primary source of communication, so if I send them all an e-mail I have to follow up with a phone call to that guy 'cause he won't see it for three days. But the other six, constant e-mail, Blackberry, whatever they've got. They're young; they're fashionable. They've got these funky things. They've got a text message device. They're all sitting in their meetings half on the phone flipping the thing over and typing back to you.

Asked how responsive he has to be to keep up with his accounts Joe laughed, "Sometimes you get a phone call like ten minutes later, 'Dude, what's up?' It all depends on the buyer, what the question is, what's going on."

Given differences in accounts, product lines, and individual styles, it is not surprising that individual sales representatives developed different BlackBerry communication patterns from each other. What is interesting about the three sales representatives quoted above is that all were initially hesitant or negative about receiving the device. All, in the context of their situated daily practices, found the tool to be generally positive. These examples highlight the fact that Linden sales representatives did not experience the BlackBerry as damaging their attempts to build relationships with customers and, in some cases, found that the tool enhanced this endeavor. To varying degrees, each experienced the BlackBerry as enabling core communication acts. Rather than damage existing work practices, they found that mobile access to email facilitated their ability to get the job done. Every member of the sales team who participated in this study reported that the tool improved daily communication practices with headquarters, and often with accounts, while on the road.

While Linden sales representatives reported that it was useful to have access to email regardless of physical location, constant connectivity as a state of being remained antithetical to their occupational identity. They did not want to project the image of a 24/7 professional. In stark contrast to the attorneys who chose to display the BlackBerry in the office without actually using it, sales representatives purposely hid the tool when wearing it on their person. It became clear through observation that the typical 'uniform' for a male Linden sales representative was jeans or tan pants and an un-tucked button-down shirt that falls below the BlackBerry device attached to the belt. Women wore similarly relaxed clothing; often jeans and a sweater or un-tucked shirt. I cannot say whether or not this was their standard dress prior to receiving the device. However, numerous informal comments revealed that individuals were purposely hiding their BlackBerrys and may have modified general dress in order to accomplish this goal. While most actually did end up wearing the device, they regularly made jokes when someone pulled the BlackBerry off its 'holster' and took a derisive tone toward those who exposed the device. In the words of Ron, "I don't flash it on my belt like you, dorko." Steve, a regional manager, went so far as to comment that he dressed specifically to conceal the Blackberry. Asked how much his family notices the device Steve said,

It's so funny, because, really this is a personal thing, but, I know I'm not a doctor or a brain surgeon or anything. And when I see them [*the BlackBerry*] on people I'm like, "I don't want to be that, or perceived that way." So, everything I wear is un-tucked. For me, I just don't take myself that seriously. It's funny because fortunately we're a loose enough company that you can do that. Otherwise I would probably wear a lot more sweaters.

Mobile sales representatives shared a strong occupational identity that emerged from the structure and nature of their job. Based in the field, these individuals saw themselves as fiercely independent and self-disciplined employees. They enjoyed not being held to a traditional schedule or working in an environment where colleagues are aware of what they do every moment of the day. Therefore, even as they began to appreciate the access to email enabled by the BlackBerry, they did not want to use the device as a symbolic marker that projected constant responsiveness or accessibility. Individuals wore the device but hid it. Working in headquarters during a sales meeting or line review, they regularly checked their BlackBerry, but did so by slipping into the bathroom or walking into a corner.

Individual patterns of BlackBerry use

Sales representatives regularly described wanting to maintain strict boundaries between time on and off their BlackBerrys. They also reported feeling generally successful in their attempts to achieve this goal. Jack, a senior director who splits his time between his home office and traveling with account executives, put this distinction succinctly. Asked how often he used the BlackBerry after having it for two years, he wrote in response to an email survey, "Mon through Friday only. Never at home. While in my office seldom. While on the road constantly...maybe 30+ times a day." Although some sales representatives chose to integrate

email into evenings and weekends, the sales team as a whole did not develop shared expectations about availability and access to email during 'off hours.'⁷⁴

Mobile sales representatives are experienced at setting and negotiating boundaries. These employees have worked out of their homes for many years and many discussed intricate systems developed in order to balance the various demands on their time. For example, Carol, a senior director, described her process of figuring out the best way to work from home,

I have an office that's completely separate. Separate phone lines, everything. I used to be in my dining room. That was terrible. And then the babies were little, and they unplugged everything. So that had to change. But you know, live and learn. I mean, it – yeah. It changes as you figure out the best way to work.

Carol translated this perspective into how she used her BlackBerry. Asked if she ended up using the BlackBerry to blur the boundaries between work and home Carol was adamant,

I only take the Blackberry if I'm doing work-related things. So, it's not going to go with me anywhere on the weekends. Because I don't take personal emails or anything like that on it. I won't – even over the weekends. And it's got my work phone number on it and I don't want to be reached over the weekend.

Joe, a senior account executive earlier quoted as engaging regularly with his key accounts via email also talked about his long standing experience of working out of the house and separating spheres of activity.

Other than my wife I have not used my Blackberry for anything personal. So, I know that it's not a friend or my mother or whatever. They'll use my cell phone and they'll contact me that way, and I have personal e-mail. I have not mixed the two in any way, shape or form, and I really don't know why. . . I have no issues separating [*work from home*] but you have to understand something. Before I came here I was independent for 22 years in this business. I've worked in an office maybe three years in 25 years. As a matter of fact my wife says I'm over disciplined because I'll get the "Honey-Do" list that I won't get to for three days. I'm working from home. Working from home is not being at home.

⁷⁴ Sales representatives did report more compulsion to use email during business hours. For the vast majority, this capacity was experienced as supporting individual efficiency and was not described as increasing daily stress.

As a group, Linden sales representatives did not embrace the device as enabling 'off hours' connectivity. Understanding how this population of BlackBerry users negotiated the potential for expanded access to email sheds light on the interaction between professional identity, daily work practice and evolving norms and assumptions.

Evolving norms and active negotiation of BlackBerry use

Unlike the lawyers, the sales team is structured as a pyramid hierarchy. As such, Linden sales representatives did not enjoy the same structural power as Linden attorneys. Yet, even though this structure can potentially lead to a more 'command and control' environment, individuals regularly asserted their self-sufficiency and freedom. This sense of individual agency emerged from their occupational identity as autonomous sales people, their role in the company as revenue drivers, and their relatively bounded relationship with their accounts (who generally do not work during 'off hours.')

Sales representatives were accustomed to being on their own and establishing individual routines regarding daily work and communication practices. Unlike the team mentality of the lawyers, these sales people saw themselves as individual islands in charge of specific accounts or a regional territory. Therefore, email patterns did not escalate.

Senior members often rise through the ranks. While the specifics of the job change as an individual moves into management, the manner in which senior people discussed their 'personality' reflected that the occupational identity as an independent, self-driven salesperson is relatively stable. Individuals across the hierarchy shared a sense that sales representatives operate under their own timeline and should be accorded a large degree of freedom in terms of how they use their time. Therefore, senior members did not generally wield official power to force individual sales representatives to be responsive to email during 'off hours.' And individual sales representatives often took pains to maintain boundaries and disconnect.

As an example, prior to receiving her BlackBerry, Tabitha, an account executive selling to independent accounts, was adamant that she was not going to let the tool shift expectations of responsiveness. Asked about evolving expectations when she first received the device Tabitha

was clear, “No, I'm not gonna let it like run my life, that's for sure. So, I'm not worried about it.”

Three years later she has continued to maintain distance from BlackBerry communication.

Asked in an email survey whether she ever totally disconnects from email Tabitha responded,

Evenings and weekends are still off limits. . . Most of my colleagues are family oriented, so weekends & evenings are usually occupied with family time. Yes, I do totally disconnect - often on the weekend. You need down time away from all the issues!

Tabitha's comments highlight how the ability of sales representatives to maintain boundaries emerged in interplay between individual acts and shared social context. Tabitha did not expect to be connected at all times. She did not relate constant connectivity to doing her job well or being a certain kind of person. Therefore, she likely took steps to maintain boundaries when she initially started using the BlackBerry. The fact that she was able to continue to uphold such boundaries after three years is a tribute to her own choices as well as the evolving social context. By referring to her colleagues as “family oriented” Tabitha projected a sense that her decisions regarding when and where to be connected were shared, acceptable and socially rewarded.

Senior account executive Ron was less blithe in his early impressions of how he would respond to having a BlackBerry. He expressed a negative impression of the device and adamantly wanted to maintain distance from email. Over the years, Ron was pleased to report that he had continued to take steps to disconnect. Ron reflected on his initial orientation toward the device after three years of use,

I just didn't want it to take over my life. I feel like it just becomes habitual for people. They don't even realize they're doing it. But I guess it is about personal responsibility. Being able to separate, give it its place. I had to learn to think about it [*the BlackBerry*] as my friend, “Ok, I have 5 minutes. It's ok to check it.” But for me, it just stays in the car. That's where its home is. I have to remember to charge it, but generally I just leave it in the car. I pull in the driveway at the end of the day, take a quick look, and leave it for the night.

Prior to getting the device, Donald, a senior account executive responsible for four key accounts, similarly carried ambivalent notions about the device. He expressed concern that using the BlackBerry would rope him into an expanding cycle of increased expectations and increased numbers of messages that would eat into his personal time. However, after three

years of using the device, Donald found that while email activity during the day increased, he was able to regulate his use of the BlackBerry at night. Donald wrote in response to an email survey,

Blackberry use definitely streams real time messages and information throughout the day. I must, everyone must continue to carve out time for the important tasks during the day in addition to the email tasks. While Blackberry is always on, I successfully put down the device by dinnertime. I'm quiet at night.

These stories are noteworthy. After years of use these sales representatives were able to maintain, if not exceed, their expectations of individual agency with regard to their BlackBerry. A few reported slipping into undesirable patterns of use. Yet, unlike the Linden attorneys, these users self-corrected and found a way to alter their relationship with the device. After a year and a half of use Allison, a field service representative, reflected on the fact that she was using her BlackBerry less over time. Asked why she limited her use she said,

Well, for me it's been a personal change. For me, it was a personal thing where I was just doing too much all the time and I said, "You know what? It's just you. Turn it off." I don't blame the company, or different managers or anything.

Senior account executive Arnold is another example. Prior to receiving the BlackBerry he discussed the potential consequences of increased access to email. Arnold was fully aware that simply having the capacity for access might cause others to assume availability. Reflecting about the imminent BlackBerry prior to receiving the device, he reminded himself that individuals have a choice in how they employ a new communication technology.

Well, you know, everybody has access to you all the time. They know you're on it. They know you're seeing things. Just seeing that you've got the messages. But, you don't really necessarily need to act on everything right away. You can if you wanted to. There's a positive and a negative to that, too. I think the biggest negative is that people have access to you all the time, and are waiting for your response all the time. The other thing is that if you carry it around on the weekends, then you see what's going on on the weekends, and that's a personal choice, you know. That's a personal choice.

After using the BlackBerry for over a year, Arnold described how his relationship with the device evolved. Asked if he ever disconnected from his BlackBerry, Arnold reflected,

Weekends. Weekends are when I really don't check. You know, when I first got it, for the first few months I was using it constantly. Weekends, everything. But I don't really

use it now and if I do use it on the weekends it's more about – it's just more about calendar than anything.

Asked what changed his behavior Arnold continued,

Oh, I just – I decided that, you know, it's crazy. Like, I mean, no one's forcing me to use it on the weekend. I would rather be away from work. This is an extension of work and I'd rather not have it infringe on, you know, on my family life. It takes it over, so. . . I don't know what really provoked it [*limiting use*], I mean, what really turned that around. But I would say, I was – at one point, I was using it a lot and you know what, I saw that, you know, it was too much and I decided to stop.

Pushed on whether or not he felt there would be any negative consequences for paring back Arnold was adamant, "No. No, no. Not at all. Not at all. It's okay." Further, he assumed that others had taken a similar path with the tool. "A lot of other people, we didn't discuss it, but a lot of people also decided to not do it so much." Whether or not this statement is true for others, Arnold's statement implies that he does not feel the pressure of shared expectations in determining his own usage patterns.

Arnold was typical of many Linden sales representatives. He was initially wary about carrying the BlackBerry. And when he found himself using the tool more than he was comfortable with, he modified his BlackBerry use. Arnold never formally discussed his usage patterns with colleagues but sensed that others went through a similar arc. What enabled the sales force to avoid developing shared assumptions of constant connectivity and availability⁷⁵ when they were all given a tool that enabled constant access to email? Active negotiation for these BlackBerry users was not overt. Not one sales representative in this study remembered an incident where they discussed expectations of 'off hours' connectivity with each other or their managers. Still, implicit norms encouraging expanded availability did not emerge. As some individuals began to send emails via the BlackBerry throughout evenings and weekends, their

⁷⁵ Rather, I argue that the sales force developed norms of diverging usage patterns and expectations of non-response during off hours.

actions did not evolve into shared assumptions that shifted norms for everyone. Individual sales representatives were quick to point out who typically sent out emails over the weekend and emphasized that they had no problem leaving such messages in their inbox until Monday morning. Phase II email revealed that sales representatives were willing to delay answering messages from colleagues and superiors. I heard no examples of an account emailing over the weekend.

Social dynamics of limiting BlackBerry use

The social process of negotiating when and how to use the BlackBerry traces back to initial orientation. Initial impressions inform early patterns of use. These acts, along with the rhythm of work and visibility of communication practices among peers, set the stage for an evolving social dynamic and ongoing individual process of re-framing the device. Just as the positive orientation of the lawyers inspired them to embrace the BlackBerry, the initial hesitancy of many sales people caused them to approach this new mode of communication with care. Many did not take their BlackBerrys out of their packaging for weeks, if not months. Sales representatives shared a sense that people were not initially using the device. Therefore, individuals did not develop assumptions that everyone in their communication network was constantly connected. Rather, they developed an implicit norm that everyone was not constantly connected. Geoff, a key account executive who was initially concerned about how BlackBerrys would shift expectations, said after three years of use,

People aren't asking for an answer immediately. Really, everyone is pretty reasonable. It's both managers and accounts, they don't expect an answer until maybe mid-day the next day. That's just kind of the way it's just fallen into place. We didn't have any formal discussion, no one ever said, "I don't want you emailing after 6:00pm or anything." People just don't do it. It hasn't turned out that way. I don't really know why.

Communication practices, occupational identity, and the temporal rhythm of work also aligned to limit the sense within the Linden sales force that expanded availability via the BlackBerry was necessary for performing a job or successfully enacting an occupational identity. While their capacity for email communication may have shifted with the BlackBerry, the daily

practices involved in selling shoes have changed little. Unlike Linden attorneys, who deal with clients working all hours across the globe, the sales representatives relate to customers who keep traditional business hours. Email messages that occurred during evenings and weekends consisted mainly of automated reports and interaction between colleagues at Linden.⁷⁶ While these messages may have been important and time sensitive, they were rarely integral to selling shoes. As Geoff reflected on his ability to leave email “behind” at the end of the day he came to a similar conclusion:

I really try to leave the email behind [*at night*]. But most of my emails are about work [*rather than personal*]. And Linden is an hour ahead of us time wise, so they’re really out of the office by 4:00 or 5:00pm my time. Customers leave at 5:00 and they’re not going to be doing email at night. So, as long as I can keep up with what’s come in during the day, pretty much after 5:00pm I’m getting more junk email than actionable email anyway.

The occupational identity of the sales person complemented the reality that the core communication was rarely happening during ‘off hours.’ These people were not only practiced boundary setters, a core aspect of their occupational identity involved being a self-motivated independent agent. As Doug said,

Salesmen like the idea that they have a lot of autonomy, have a lot of freedom, and ultimately you’re being judged on your numbers. Other than something that’s a real problem, like drinking issues or what have you, they’re gonna pretty much leave you alone and put up with idiosyncrasies as long as you make your numbers.

Many referred to their desire for freedom and independence in daily life as the reason they entered sales. It was also a reason to be suspicious of the BlackBerry. This initial caution prevented people from translating the potential for ubiquitous email *into* ubiquitous email. A culture of individualism was shared throughout the ranks of the sales force. So, even though

⁷⁶ During Phase II interviews I gathered email data for 24 week days and 15 weekend days of BlackBerry use by Linden sales representatives. Of the 99 ‘off hour’ messages exchanged during these days only 7% of messages involved a customer. 12% were personal emails and the rest were automated reports and interaction among colleagues.

sales representatives enjoy close friendships with each other, and the majority engages in ongoing email exchanges with colleagues throughout the day, they did not create shared expectations regarding the 'right' way to use the BlackBerry during 'off hours.' While some people started to use the BlackBerry to send emails during expanded hours, others did not mimic this behavior. While managers could have forced top-down expectations of responsiveness to email, they did not.

After using the device for three years, Ron admitted that his initial fears that management would begin to judge sales representatives on BlackBerry use had not come to pass,

I thought there would be like a check list, on who was using it or not using it, that could be held against you somehow. Maybe in a quarterly review, like, "If you had used your BlackBerry more we wouldn't have lost this sale" kind of thing. Maybe it was me being paranoid or making that up. But I've seen things with voice mail, people losing their jobs, or getting a bad rap, for being out of touch. But it hasn't happened with the BlackBerry. It really hasn't.

Even in the absence of top down mandates, expectations of expanded availability can emerge as individuals copy the actions of others. The occupational identity held by mobile sales representatives did not encourage individuals to emulate the usage patterns of either their colleagues or their bosses. Two months after receiving the BlackBerry, Nate reflected this sense:

Now, it's up to the individual to let the technology work for them. Just like a laptop, just like the wheel was an adjustment. Everything is an adjustment to people's lives and psyche. I think now it's up to the individuals to interpret and use it for them.

Individuals reported that this sense of personal responsibility regarding BlackBerry use lasted over time. Asked about expectations a year after beginning to carry the device, Steve, a sales executive in charge of independent accounts, wrote in response to a question on a mini-survey, "I would say that it is for the individual user to determine -- no expectations, no exceptions."

Matt, a senior account executive of independent accounts, related a sense that individuals developed different patterns of BlackBerry use. Asked if he sensed shifting expectations regarding use of the BlackBerry after a year Matt wrote in response to an email survey, "Not really. I think most people use them if they help but others don't see a need for them. I don't

feel any pressure or expectations to use it.” Two years later he maintained this perspective. Asked again about expectations in an email survey he wrote,

I think it varies by user. Some of my coworkers turn theirs off when they are done working. I tend to keep mine on so I will occasionally answer a message late in the day or early in the morning because I see it blinking. As a result I tend to send a lot of notes at odd hours (I have a 3 hour time difference between HQ and my home) so I think people on the other end think I am always working even when I am not.

Matt was aware that he may be sending a signal about his work habits to his colleagues. He was not concerned that this signal would become to a shared assumption of connectivity.

Linden sales representatives did not generally engage in the practice of copying numerous colleagues on every email message. Matt expressed awareness of the symbolic messages embedded in the timing of email activity. Such symbolic sensemaking of the ‘meaning’ or social expectations embedded in the timing and patterning of email messages becomes more intense the more that individuals in a communication network are aware of each other’s communication patterns. Unlike the Linden attorneys, sales representatives generally engaged in point to point communication with their customers or buyers (occasionally cc-ing their direct superior or customer service representative). Regional directors would send announcements to all of their direct reports, or the ‘sales team,’ and individuals would respond either directly to the boss or engage in a team wide discussion. These discussions were meant to engage colleagues on a problem or issue. They did not habitually copy colleagues on messages for the sake of keeping others in the loop. This engendered a general lack of visibility into each other’s communication patterns and limited how much people created assumptions about appropriate or expected patterns of BlackBerry use.

Experience of BlackBerry use across the sales hierarchy

Expectations regarding responsiveness were experienced differently depending on job position and organizational hierarchy. Mobile management faced the greatest email demands. Directors and regional managers described fielding messages for approvals and direction from their direct reports while constantly dealing with expectations from above to synthesize and

report on their region as a whole. David, a senior account executive in charge of key accounts, pointed out this dynamic when he described how his relationship with the BlackBerry compared to his boss's. Asked about expectations regarding responsiveness after two years of use David said,

It just depends who you are and what you're doing too. In the case of Steve, he's got 5 people reporting to him. So, I think it's kind of relative on that too. I've got one person to report to and no one is reporting to me. So, that is one conversation, one phone call, whatever. Steve's different, he's getting bombarded.

Likewise, while Donald was initially ambivalent about having a BlackBerry, he appreciated the fact that his manager was more responsive. Asked whether he noticed a difference in his boss's communication patterns after his superior received a BlackBerry at the original leadership retreat Donald said,

Yes, I would say that I get very timely responses, so he is clearly using his BlackBerry everywhere he needs to be, and everywhere he happens to go. I think it really helps him be a highly effective manager.

Regional managers and senior directors are also the direct point of contact for any request coming from higher level management at headquarters. These are 'salesmen' whose core communication acts are no longer with customers. Their job involves taking a pulse on what is going on in the field while being able to answer questions from headquarters. While this bridging role did not change with the introduction of BlackBerrys, the tool enabled individuals to shift their energy between competing demands. BlackBerry enabled access to email allowed managers on the road to keep up with the communication patterns of colleagues sitting in front of a computer all day. Senior director Martin was typical of those in this role in his sense that the BlackBerry encouraged people at headquarters to shift their expectations regarding how available sales management could be while on the road. After using the device for a year Martin asserted in response to a question on an email survey that, "I think senior management feels this makes us accessible 24/7." Two years later this impression had not diminished. Asked about expectations Martin wrote,

I believe the company feels that you should almost never be out of touch with this device. Yes, I believe expectations have changed from "He's traveling and will get back to us soon" to "He might be on a plane but we'll hear from him as soon as he lands."

Jack, also a senior director, took longer to come to this conclusion. After six months with the device, he was adamant that it did not affect his pressure to respond to emails. Jack explained,

I think I reply to people within a reasonable amount of time. And I don't think I need to change that. No one has told me I need to change that. So, you know, I've tried to keep a standard. I'm not looking to accelerate the standard because I have a Blackberry.

A year later Jack continued to assert that he experienced no increase in expectations. Three years after receiving the device his tone had changed. Asked in a survey about expectations with regards to email Jack wrote, "With the BlackBerry I believe people feel that if they sent you an e-mail then you have seen it immediately. That's not a healthy expectation in my mind."

While these sales managers and directors often rose through ranks, the work practices demanded of a job in management led to a different experience of the BlackBerry than those sales representatives actively selling shoes. Management also received significantly more emails. Senior directors and regional managers reported receiving between 70 and 100 emails messages a day. Field service representatives and account executives on the other hand, put this number between 10 and 30. Phase II data confirms these estimations. The one senior director in this data set received an average of 62 emails a day on week days and the two field service representatives, on the other hand, received an average of 12 emails.

Managers are not directly responsible for getting in front of an account in order to sell product. When they accompany account executives to product presentations they do not take an active role in presentation. Managers are strategizing with senior officers, culling information from the field, and managing people. Therefore, the core communication required to do the job often happens via email. Account executive, Doug, pointed to this dynamic in describing why he does not want to make the leap to management:

There is absolutely a night and day difference between management and sales. I know many miserable people who wish they hadn't gone into management. Then their BlackBerry is tied to them. They're the ones looking at it at 7 or 8 at night. . . The managers, they have to account for their time a little bit differently.

Within the sales force, middle managers faced more pressure than their subordinates to be on the road and responding to numerous incoming emails during business hours. Nevertheless, these sales managers also developed and maintained a positive orientation toward the device. Managers reported that they occasionally struggled to keep expectations realistic during the day, but, unlike the Linden lawyers, they did not describe a constant struggle to disconnect at night.

In sum, the sales force as a whole did not develop social norms that assumed expanded connectivity to email during 'off hours.' Even when individuals joked that they could continue to discuss strategy, break down forecasting reports, or deal with customer issues throughout the night, they maintained a general separation between work hours and personal hours. Each sales team (a regional manager and his or her direct reports selling a specific product line) created some level of shared understanding about expected patterns of communication within the team. These internal norms diverged among the teams.⁷⁷ Beyond the local, two related norms were experienced throughout the entire force. Sales members shared an assumption that each individual would develop a distinct relationship with his or her BlackBerry and engage in different patterns of email communication via the device. Individuals regularly described their impressions of how colleagues used the device in a way that was different from their own patterns of use. These impressions were based on informal chatter, reputations, and witnessing email patterns and response times.

This first norm set the stage for another norm regarding expectations of response to emails. Although Phase II data reveal that sales representatives were receiving some emails during 'off

⁷⁷ Some sales teams maintained ongoing communication throughout the day, some did not email or speak for weeks. Some account executives only communicated with their superior, some engaged in point to point communication among sales representatives, and some would CC the entire team on messages. My sense was that these differences emerged due to the personalities and relationships of the individuals on the team, as well as the nature of accounts and product lines. For example, larger accounts required more collaboration between the sales representative and their boss. And, those selling in the 'fashion forward' line would work together on promotions and working to balance the assortment of product within a region.

hours' (average of 1.8 'off hours' emails per week day and 1.7 emails per weekend day), they were generally replying to these messages the next business day and no individual related feeling pressure to respond to incoming messages during off hours. The interplay between professional identity and work practices supported these norms. And, in an occupation judged by sales numbers rather than speed of responsiveness, individuals did not wield the device as a symbolic tool to show commitment or dedication.

Consequences of BlackBerry use

After three years of use the Linden sales force did not develop norms of constant availability with their BlackBerrys. All salespeople who participated in this study, no matter how initially positive or negative they felt toward the device, reported that they experienced the BlackBerry as a benefit over time. To a varying degree, people throughout the sales force appreciated the ability to keep up with email throughout the day while on the road. The vast majority reported a gain in productivity in terms of the ability to effectively respond to customer demands⁷⁸ and management requests during business hours. They also explicitly praised the BlackBerry for enabling more, not less, personal free time. According to individuals across the sales force, using a BlackBerry allowed them to spend less time in front of the computer in the evening, (whether at home or in a hotel) because they had addressed the majority of messages during the day.

This gain was experienced across the hierarchy. Asked the most useful aspect to having a BlackBerry, John, a senior vice president of sales, immediately replied that it "creates time." He elaborated,

⁷⁸ Responding to customer demands could either mean responding to an email from a customer via the BlackBerry or using the BlackBerry to communicate with Linden colleagues in order to handle customer issues (such as the request to return shoes that aren't selling, issues with delivery or 'fill in' of specific product, or negotiations with the credit department) that came up during a face to face account visit.

Because of the BlackBerry I have taken the dead time that I would have had, and I've turned it into productive time so I don't have to do it when I get home. It definitely gives me a lot more free time, I think, I've seen real gains, and it's not measured in minutes, it's measured in hours. Especially if I'm on the road.

Asked later in the interview to summarize his experience with the device, John returned to this theme. He reflected that,

The best *[thing about the BlackBerry]* is turning dead time into productive time, and then freeing up - it frees up a lot of evening time for me to do something else that's better. I don't know if my family has noticed it or not. But, I've clearly noticed it. And they don't love it when I'm locked up in my office for hours. So, I would say they see that as a good thing.

The senior directors and regional managers who complained of rising expectations also felt that the BlackBerry gave them more personal time. Although those in this role had to negotiate numerous emails coming from headquarters and the field, using a BlackBerry allowed them to limit backlog. Six months after beginning to use the device Jack reported,

I just think it's helped me. It's helped my life be more tolerable. So, again, at 9:00 o'clock, I'm not downloading 100 emails. I might be getting ten, because I've seen the other ones. It absolutely gives me more time. I don't know where it would suck any time away from me.

And three years later he maintained that the BlackBerry gave him, "More personal time because I can check e-mails all day long and not have 75+ waiting for me at end of day."

Jim, a regional manager, was excited and animated describing the impact of the BlackBerry on his family life. Jim believed that, due to the BlackBerry, he gained enough personal time to commit to coaching his son's baseball team. In Jim's words,

We're emailing all the time, right? And I'm on the airplane every week for X hours. So, I can take care of all those interoffice emails. Right up until when they take off - although they say you can't - it works fine 'til you're in the air, you know what I mean? It's the same coming down. So, that's a lot of time that I couldn't do email before. So, I can now get off the plane let's say, arrive and touch down at 4:00, and be at my son's practice by 5:30, and I'm like 90% clear.

Asked if he would check the BlackBerry during practice Jim was adamant,

No! No. No, because I'm 90% clear so I'm less worried. I'll leave it in the car, get out of the car, boom, go play ball. And then I can go and then have dinner with him [son] and enjoy dinner. So, to me, all that's free time now that before I couldn't have had. So, it's opened up what's important in my life which is spending more time with him, to be able to do that kind of worry-free because I'm clear.

In the old days I couldn't do that because there wasn't time to go plug in, get going, connect wirelessly at the airport, do my emails. You've got to be on the plane, then you've got to get through security. So, that whole chunk of time is now all active, not passive. So I pick up, every trip to New York, two hours of time where I can be doing stuff that I couldn't before.

Account executives related a similar experience of the BlackBerry. These front line employees generally dealt with fewer email messages than their managers. Nevertheless, prior to carrying a BlackBerry they would also come home after being on the road and immediately check email. For these experienced boundary setters, email at home was experienced as an infringement on 'their' time. As Nate described,

I think, for so long, people would kind of go through the workday being a sales guy. Just, as a sales guy, you go through the workday, you come home and you get your 50 emails, or your 10 emails, whatever you get per day, and then you spend kind of *your* time, your family time doing it. Whereas now you could rip through these as you're waiting for your appointment or your flight.

Tim, a national accounts executive, experienced this benefit immediately. Prior to getting the BlackBerry he expressed concern that the tool would not be useful for someone in his position. Tim assumed that the number of forecasting reports and Excel spreadsheets being sent over email would render the BlackBerry useless. He soon discovered that these substantive email messages were just a small fraction of his daily email activity. Within months of carrying the device Tim, and his family, were struck by a change in his communication patterns. According to Tim,

And so, literally, when you would fly home at night you would go home and have to directly get on email. Actually, my wife joked that last week. She said, "You didn't go to your man cave" which is my office in my house, when I got home from a trip. I said, "Well, it's because I have my BlackBerry." And literally, once I landed, I could download all my messages, and I could act on some of them while I waited for my bag, and the rest of them I would get, basically on my way home, and answer them just if I think it's

important. But, prior to the BlackBerry, you literally go back to your office and sit in front of the computer for at least an hour.

Checking email on the BlackBerry is quick and easy. However, users experience some barriers to the usability of email. The screen is small, the keys are cumbersome, it is difficult to view attachments and often impossible to do work in other software programs like Word and Excel. While this can be frustrating if someone is attempting to conduct work through the device, it can become a welcome distancing mechanism if they are checking email during 'off hours.' After three and a half years of using the device senior manager Martin, described how, the features of the BlackBerry allowed him to distance himself from work. Martin wrote in an email,

I believe it [*the BlackBerry*] gives you more personal time. It saves you from going into your office and looking at email after hours or on weekends. Sometimes if you go into your office, you get dragged into stuff and the next thing you know, you've spent hours that you never intended to.

Roberta, a mom and senior account executive responsible for a major department store, echoed this sentiment,

I think it's easier for me just to scan here [*on the BlackBerry*] as opposed to going through the whole starting up the computer. So, it saves me time. I think that I'm connected as much. I'm not checking more. I'm checking the same [*on evenings and weekends*]. It's just easier to check and I'm spending less time because I would have to wait for the whole startup. And then I find when I do boot up the computer, that I end up doing more than I expected. It's like, "Okay, let me just check this," or "Let me just check that online."

So, as far as just checking, keeping in the loop, and responding if I need to, as opposed to doing the whole startup and finding myself like, snowballing into, "Oh, let me just do a little bit of this or that, get this done for Monday," or whatever, it's great. So, it's made being a working mother so much easier. I can't believe I'm such a BlackBerry fan at this point [*Laughter*]. Remember what I was saying a year ago? And now, I'm like, "I can't talk about BlackBerrys enough."

Roberta was struck by how much her opinion of the BlackBerry changed over time. This is due to the fact that her initial fears of increased expectations did not materialize. It was striking that in the Linden sales force people continued to feel that the device saved them time after several

years of use. This experience contrasts to the popular myth of BlackBerry 'addiction' as well as the direct experience of Linden attorneys.

One year after getting the device, senior account executive Matt wrote that the most useful thing about the device was that, "I don't get stuck downloading a ton of email every night. I can use the Blackberry to answer simple messages during the day which leaves me time to use on the bigger issues at night." Two years later this sentiment was even stronger. Matt wrote,

I get more time in the end, I believe. It frees me up to reply to some messages (those that don't need a lot of information to be relayed or analysis to be given) quickly and at convenient short time windows. Without it I would have to answer all those short messages at the end of the day. With it, the end of day total email to do list is so much smaller because I have taken care of the small issues. It's the same with sending notes to people.

Donald, also a senior account executive, shared a similar trajectory of experience. After carrying the device for a year he was asked if anything in his everyday life had changed with the BlackBerry. He wrote, "It's great, it keeps me from stockpiling email messages. As a result, my days end sooner & begin with less backlog." Two years later he echoed this statement. Asked the most useful aspect of the BlackBerry he wrote, "More time. I deal with emails during dead time during the day, on business trips (e.g. riding on the Rental Car Bus). As a result, I save myself from looking at 30 emails at the end of the day."

Matt and Donald were both initially hesitant about how the BlackBerry might affect their daily life. Another senior account executive, Ron, was adamantly against the device. Yet, three years later he described how he learned to embrace the potential for mobile email. According to Ron,

Those situations come into play and have positive effects [*examples of useful email messages sent/received while at an account*]. As a result, I have gotten better at using it [*the BlackBerry*] to my advantage, learning to pull it out throughout the day and check on things, respond to things. And then, I realize, there is not so much the end of the day. I used to come home and have to sit down in front of the computer for hours. It is the biggest relief at the end of the day, having driven 300 miles back, to pull into the driveway and be done.

Now, I will pull into a gas station somewhere along the way and scroll through messages on my way home. Then, I can address things on the phone the last part of the drive. Call my customer service rep about this and that, what have you. I know exactly what I have in front of me. So, you're thinking, "Ok, I can get home and go right into the office and solve a bunch of shit quickly." It's not at all like what I used to do. The dread at the end of every day, because I'm coming home to 70 emails I have to deal with and respond to.

Similar to Ron, Doug had a negative understanding of the BlackBerry before receiving the device. After three years of use he compared his current orientation toward the BlackBerry with his early fears,

Back in '05 I was concerned about the BlackBerry. But, it's been good. It's more positive than negative. It didn't change my autonomy and freedom. I suppose there's that potential but it didn't happen with me. It's a good tool. I certainly think it's a good tool. If I said less than that back in '05, well, I'm not the first guy to not embrace change.

Yeah, it allows me to check in, stay in the flow of the day, eliminate, keep up on email so at the end of the day I have more time when I come home. Ok, I'm still doing it [*writing email messages*], but I'm doing it at 2:00 in the parking lot rather than when I come home. It makes life move along a little faster so the end of the day *is* the end of the day. For some people the BlackBerry may make the day longer, but for me, I look at it as, I cleaned up stuff between 7:00 and 5:00, then when I come home, I look at my computer emails, and I'm 100% done for the day. I'm not looking at my BlackBerry late at night.

Ron and Doug are two among numerous examples of individuals in the sales team who described BlackBerry use as positive in a manner they did not initially expect. Linden sales did not develop shared expectations of 'off hours' connectivity; rather, they created norms of individualized use and expectations of non-response during 'off hours.'

Understanding their process sheds light on how initial frames of reference orient action. Because initial technological frames of reference did not converge, individuals did not begin using the device with a shared set of assumptions regarding how the tool would play into their current work practices and occupational identity. Unlike the legal team, they developed a norm of distinct patterns of use. Members of the sales force understood that individuals held divergent ideas of the device. This provided each BlackBerry user a degree of freedom in figuring out when and where an individual wanted to be available to email. Such freedom also gave individuals the sense that they could alter email patterns if desired.

Over time, sales people continued to assume that it was up to individuals to figure how to use the BlackBerry in a manner that worked for them.⁷⁹ This process was encouraged by the structure of the work and visibility of communication patterns. The fact that people were not co-located, and that different territories required different daily work practices, also discouraged the creation of norms that took for granted a singular pattern of BlackBerry use. Table 5 presents an overview of the process from individual framing to personal consequences in the U.S. Linden sales force.

Table 5: BlackBerry experience over time - Sales

Initial Frames	Use	Norms	Consequences
It takes you away from the element in which your product is sold, where a true salesman learns how to increase his business because he's able to dial in on that particular retailer's consumer's needs.	When I see them on people I'm like, I don't want to be that, or perceived that way. So, everything I wear is un-tucked. I just don't take myself that seriously.	I just didn't want it to take over my life. I feel like it becomes habitual for people, they don't even realize they're doing it. It's about personal responsibility. Being able to separate, give it its place.	You would come home and get your emails, and then you spend kind of <i>your</i> time, your family time doing it [responding to email]. Whereas now you rip through these as you're waiting for your flight.
Oh crap. There goes my last escape. Now, as I'm driving I'm supposed to be downloading stuff, reading emails and keeping track — causing the sirens to come after me.	It just stays in the car. That's where its home is. I pull in the driveway at the end of the day, take a quick look, and leave it for the night.	People aren't asking for an answer immediately. Really, everyone is pretty reasonable.	My wife joked last week, "You didn't go to your man cave," which is my office. When I got home from a trip. I said, "Well, it's because I have my BlackBerry."

⁷⁹ Ironically, this sense of individual agency within a social network was similar to what the Linden attorneys initially envisioned and the sense of looming expectations described by the attorneys was exactly what many sales representatives feared.

Initial actions set the stage for the social process of negotiating a new communication medium. In a recursive relationship between individuals and their social environment, norms and expectations then influence individual experience and understanding of the device. While understandable in hindsight, this trajectory of experience with the BlackBerry is often surprising to actual users. In contrast to the initial assumptions of many, not one person on the sales force who participated in this study felt that using the BlackBerry stripped them of personal time or added stress to their lives. The majority reported no effect on stress and several felt that access to email while on the road significantly reduced their stress level. Overall, these communication partners exploited one affordance of wireless email (the ability to keep up with messages while traveling) while controlling another (the potential for constant connection and expanded access).

After three years they shared a general sense of relief and appreciation for a tool. In the words of Roberta,

When it came in the box, I was fit to be tied. I was like – I just felt like I couldn't handle another thing and I was very reluctant. I think I was probably one of the last ones to like, turn the thing on and get connected. But I never went back.

Asked about her sense of the device now, after two and a half years, Roberta was adamant. "I think it's the greatest thing in the world. It has made my life incredibly easier, not harder."

Chapter 6: Analytical Comparison: Law vs. Sales

Witnessing how individuals at Linden experienced their BlackBerrys over the course of three years was an opportunity to study the social process of how people interpreted, used, and experienced a new communication technology over time. The research questions that oriented this study asked how the potential for expanded access to wireless email would be enacted within different social contexts in the workplace, and under what conditions individuals would experience diverse consequences from the use of wireless email. I address these questions through a perspective that integrated theories about 'doing' (practice) with theories about 'being' (social identity).

People are motivated to use a new communication technology to further their efforts to do a good job and be a certain kind of person. In attempting to fulfill these goals, individuals are continuously creating, discovering, and negotiating the norms and expectations shared within a salient social context. Individual actions are informed by understandings of valued social worlds. Individual actions simultaneously serve to re-create and potentially shift the social character of these worlds. A 'social context' does not exist as object or entity. The 'social' lives in the interpretations, expectations and actions of the individuals participating in a particular environment. Thus, the mutually constituting relationship between individual agency and social context is intricate and complex.

At Linden, individuals engaged in an ongoing process of framing, using, and re-framing BlackBerrys. Individuals developed individual 'technological frames of reference' toward the device. Frames are individually held interpretations of a situated occupational and social context. Frames influence use, which influences socially shared understandings and expectations, which in turn affect individual experience of a technology. Individual frames thus evolve over time. Initial convergence in technological frames of reference set the stage for the emergence of norms that assume a 'standard' or typical usage pattern enacted by all members of an organizational function.

This chapter compares how Linden attorneys and Linden sales representatives engaged in this process. It highlights the distinct trajectory each group experienced. Finally, it presents the key elements that affected the process of individual framing and social structuring of a new communication technology at Linden. This ongoing process of individual framing and social structuring evolved differently within the legal team and sales force at Linden. For each group, the process and unintended personal consequences of carrying a BlackBerry could be traced to initial interpretations and frames of reference.

Linden attorneys initially developed positive orienting frames. These frames aligned with a strong occupational identity and converged within the group. As such, these frames influenced the attorneys to participate in a dynamic of escalating expectations of connectivity. The attorneys developed assumptions of expanded availability via the BlackBerry (both with each other and with internal clients). In acting to satisfy shared expectations, individuals reinforced assumptions of extensive availability in their patterns of use, and team members developed similar communication practices with the device. Despite a fairly egalitarian power structure, and explicit attempts to engage in shared reflection on the role of the BlackBerry in daily communication, individual attorneys struggled to disconnect and balance the different demands on their time. After three years, Linden attorneys were using their BlackBerry to assert a salient occupational identity and maintain their position as part of a legal team. Linden attorneys reported that carrying a BlackBerry limited their ability to enjoy disconnected personal time. Individuals did not feel they were personally better off; rather, use of the device created stress and challenged personal relationships.

The mobile sales force, on the other hand, initially developed divergent, ambivalent, and often negative orienting frames. This created a social environment where people felt able to define for themselves how and when they were going to be available through wireless email. After three years of use these users continued to enjoy diversity in how they engaged with communication partners via the BlackBerry. Unlike the attorneys, Linden sales representatives did not develop clear normative expectations regarding when, where, and how often they should be using the device to check and send emails. Rather, their norms centered on how *not*

to use the device (displaying it on one's person), where *not* to use it (in meetings with customers), and when *not* to respond (after hours email responses were not generally necessary).

They assumed diversity in usage. The variety of individual use patterns emerged as people developed an initial technological frame of reference that did not align with that held by their colleagues. This spectrum of initial frames enabled individuals to develop a relationship with the BlackBerry that was relatively more self-directed than those operating under the assumption that their communication partners interpreted and used the device in a manner that was highly aligned. The lack of physical proximity among interlocutors, the diversity of client accounts, and the sales occupational identity of autonomous agents contributed to upholding these different norms of usage

Within these differences, sales representatives engaged with the device to enhance their daily communication during business hours. Individuals negotiated their patterns of BlackBerry use in light of personal preferences, relationships with accounts, and the communication patterns of immediate colleagues and superiors. Although the sales people did not create expectations that assumed everyone would engage in certain usage patterns with the BlackBerry, they did develop converging orientations toward the device. Over time, orienting frames toward the BlackBerry became overwhelmingly positive. Across hierarchical levels, product lines, and account types, Linden sales representatives asserted that using the BlackBerry reduced stress, enhanced individual efficiency, and enabled significantly more personal time.

Framing BlackBerrys: Law vs. sales

Linden attorneys moved from being excited about the BlackBerry to experiencing a general sense of resignation and disillusion. Linden sales representatives had a dramatically different experience of the device. I argue that this happened as the result of a process of framing, experiencing, and re-framing. Interpretation is reality and that reality serves as the context of

action. Therefore, attempts to understand action must begin with interpretation.⁸⁰ How do individuals establish a sense of how a new communication medium might fit into their existing repertoire of communication acts? I argue that users develop technological frames of reference about wireless email devices. Such frames of references inform how they initially make sense of and use the device. Frames then evolve over time in relation to the demands of their social context and their individual experiences of use.

Engaging with a technology (Is it easy to use? Do I feel in control and competent?) and negotiating assumptions within a social context (What are others expecting? Are they getting the message I want to send?), may challenge or uphold initial frames of reference.⁸¹ Shedding light on the user's initial orientation to a technology provides insight into how this process evolves (Davidson 2002). Scholars have shown that the same technology will be experienced differently and occasion distinct outcomes and patterns of use in diverse social contexts (Barley 1986; Bijker 1995; Orlikowski 1992; Prasad and Prasad 1994). Below, I outline how individuals developed initial technological frames of reference. I then trace how these frames evolved over time.

These data suggest that for both Linden attorneys and Linden sales representatives frames emerged from four interrelated domains: initial expectations, initial introduction, individual projections about how the tool will enable or constrain daily work practices, and shared occupational identities. Communication is inherently social. Therefore technological frames of reference about a BlackBerry reflect individual assumptions about social context. The degree of frame convergence among a group of communication partners at any point in time affected the

⁸⁰ In the words of William James, "Each of us literally chooses, by his way of attending to things, what sort of a universe he shall appear to himself to inhabit." *Principles*, 1:424, 1890.

⁸¹ While not using the language of 'structures' and 'agency' this description is very much in line with structuration theory in understanding the mutually constituting relationship between individual acts and social structures; individual acts continuously re-enact structures while social structures inform acts Giddens, Anthony. 1984. *The Constitution of Society: Outline of the Theory of Structuration*. Berkeley: University of California Press.

extent to which assumptions were shared regarding how individuals should be using a particular technology.

Data from the legal team and U.S. sales force at Linden provide grounded examples of the framing process. This study allows insight into the nuances of framing processes within different occupational groups in the same organization. Interrogating how attorneys and sales representatives made sense of their BlackBerrys over time highlights the different components involved in framing new technologies. This activity reveals how distinct frames and different patterns of frame convergence can emerge and evolve within the same organizational setting.

Key elements that informed initial framing

Impressions of the technology based on cultural exposure

While potential users engage in their own process of sensemaking with respect to a new technology, their interpretation is situated within particular cultural, organizational and occupational contexts. Many technologies are ascribed considerable cultural baggage -- ideas potential users carry about what kind of person uses the device. Is the tool 'cool' or 'addictive,' 'professional' or 'impersonal'? Such impressions are the product of innumerable messages received through advertising, news coverage, exposure through friends, and observation of others. Such impressions shape individuals' sense of the 'type' of person who uses the technology. They also affect whether or not potential users see themselves to be aligned with their estimation of a 'typical' user.

As a tool that has become steeped in a cultural conversation about the nature of professionalism in modern life, the BlackBerry carries symbolic properties of connectivity, responsiveness, prestige and 24/7 availability. Linden attorneys resonated with this stereotype from a professional, if not lifestyle, perspective. These lawyers described choosing to take jobs as in-house counsel in order to avoid a life of constant availability. Thus, they felt they could manage the 'addictive' properties of BlackBerrys because of their immediate social context. They assumed that carrying a BlackBerry would enable them to 'be' a better lawyer without forcing them to adopt the expectations of connectivity they wanted to avoid. There was a

symbolic alignment between cultural interpretations of the BlackBerry held by Linden attorneys and an occupational identity that continued to be salient even as they moved in-house. In fact, the pains that people took to defend the rigor of their job implied that by taking an in-house position, Linden attorneys had put themselves in a difficult identity position vis-à-vis traditional corporate attorneys. Carrying a BlackBerry allowed them to feel symbolically closer to such occupational counterparts.

During interviews, the attorneys projected this perspective in a general sense of excitement toward the device, descriptions about how the job was less 'cushy' than those in corporate law might assume, and comments about how, as lawyers, it 'made sense' for them to carry a BlackBerry. The legal team shared an understanding of the BlackBerry as a cultural object symbolically aligned with a certain occupational identity. This shared understanding contributed to individuals developing converging and positive initial technological frames of reference.

Linden sales representatives, on the other hand, actively wanted to distance themselves from the broad cultural depiction of BlackBerry users. A minority of sales representatives who saw themselves as 'technologically savvy' positioned the BlackBerry within their general orientation toward technology. These sales representatives were excited about receiving the tool they saw as 'cool' and thought it would increase their image as someone 'on the go.' The majority of Linden sales representatives, on the other hand, related the BlackBerry to the cultural story of constant connectivity and wanted to distance themselves from the identity of the 'always on' professional. These sales representatives felt that the BlackBerry projected an image that would undermine their sense of self as autonomous agents in charge of their own time and travel. This perspective came across in comments about not wanting to be "watched" and choosing a career in sales because it provided a degree of freedom and independence from a 9 to 5 schedule and corporate bureaucracy. These interpretations of what the BlackBerry 'meant' from a broader cultural and symbolic perspective set the stage for Linden sales representatives to develop divergent, ambivalent and often negative initial technological frames of reference.

Interpretation of formal introduction to the technology

The framing process is initially influenced by the cultural context. Ideas generated from popular culture shape how a tool is initially understood. The first concrete information about how the technology might fit into a particular situated context occurs when people discover they are going to receive the device. Introduction of a new technology provides users with information about the power dynamics behind the decision to purchase a new technology and about how leaders frame the device. What expectations do they have? What do they consider appropriate? What kind of return on investment do they hope for? In developing technological frames of reference, individual users integrate this organizational perspective on the technology garnered from its introduction with their cultural understandings of the symbolic and functional properties of the device.

Aside from official documentation, the manner in which leaders refer to the device in formal presentation and informal discussion provides users a sense of how actual expectations align with the 'party line.' Those at the leadership retreat heard the most senior people in their company stand up and reiterate the message presented on a tip sheet written by Human Resources; "BlackBerrys are a gift intended to increase individual independence and support individual work style. BlackBerrys are meant to help you and can be freely returned." Enconced at a retreat, people repeated this language informally, developed a shared sense of excitement regarding the tool, and generally felt that the device symbolized respect and autonomy.

There was a striking difference between this rhetoric and the email sent to the sales force. Those at the leadership retreat were given a glossy packet of materials emphasizing that, "We're always looking for new ways to make the challenges of your job a little less...challenging." Individuals in the broader sales force were introduced to company expectations through the curt sentence, "In an effort to improve your ability to manage work and communications while traveling, we're happy to announce that you will be receiving a new Blackberry handheld soon."

In other words, the senior team heard that they were being provided a tool intended to make their job *less* challenging and *less* demanding, while increasing flexibility and, believe it or not, making work fun. The sales force, on the other hand, received a message devoid of the friendly and explicit language asking people to frame the BlackBerry as enabling individual work style. It implied that the BlackBerry was a device provided in order to help them be better workers – regardless of challenge, demand, flexibility or fun.⁸²

This rhetorical difference continued with the language outlining company policy regarding returning the device. The leadership group was told explicitly that, “accepting the BlackBerry® device is optional. You’re under no obligation to keep it.” While the sales force was informed that, “If you do not want the Blackberry for any reason, please contact your manager immediately to discuss your decision. You need his/her approval to not receive the Blackberry.”

Taking this language at face value, it appears that those at a higher pay grade were being provided a different device from the general sales force; a device that carried distinct implications for work practice and expectations from leadership. The leaders in the company were given what was understood to be a genuine choice as to whether they wanted to accept the device. The tool was presented as a technology intended to increase the user’s status as an autonomous agent in control of individual communication patterns and work style. The broader sales force, on the other hand, was given a tool that appeared to degrade their position as autonomous agents. In order to reject the tool, sales representatives were required to make an official request of their manager. Further, the leaders were given a ‘gift’ (no mention of cost was made on any of the welcome materials at the leadership retreat) while the sales representatives were given an expensive piece of technology. The roll-out email to sales

⁸² The lawyers who did not attend the leadership retreat expressed a similar perspective of the BlackBerry. These three lawyers initially relied on their colleagues to get a sense of what senior management expected in regards to the device. Outlining why they initially wanted a BlackBerry, these lawyers described the tool as a sign of respect that would enable them to better perform for their job as ‘client service’ oriented attorneys in a manner that upheld their individual flexibility and freedom. This language was seemingly genuine and closely mimicked the spirit of the letter written by HR and passed out at the leadership retreat.

outlined exactly how much each cost center was being charged for the device.⁸³ Individuals interpreted the fee as implying an expectation about how they were expected to use the device. In essence, if cost units were paying a significant amount of money to provide BlackBerrys to the sales force, individual users must increase productivity and efficiency so that they would see a return on investment.

This message was met with grumbling and resistance. Sales representatives shared an occupational identity that centered on individual freedom and control over time and work practices. Many expressed an unwillingness to give up this sense of freedom and, given their introduction to the BlackBerry, feared that the device might imply a need to be more responsive to colleagues or less self-directed in their time and work practices. This reaction contributed to the initially negative opinions of the BlackBerry held by many of the sales people and was likely a factor in motivating individuals to draw clear lines delineating when and where they used the device.

Projections of how the technology will align with ideas about work and self

Cultural inputs contribute to individual framing of a device. Introduction provides information about general expectations. However, the numerous micro choices involved in deciding how to use a technology emerge from situated practice. Particular people attempt to accomplish particular tasks within a particular material and social setting. Understanding how users frame a technology in light of their situated context involves understanding what people *do* on a day to day basis and who they are trying to *be* within that doing. Prior to substantive experience with a device, users project ideas about how they might use the technology to perform their job and how this may help them to enact salient identities within these practices.

⁸³ Cost centers were charged \$600 per BlackBerry and an ongoing service fee of \$40 a month for each user. The legal department cost center was being charged an identical fee as the sales departments. However, individual lawyers were not made explicitly aware of this cost.

People develop, project, maintain and experience a generalized occupational identity through interaction with immediate colleagues. Within an organizational context, such interactions often occur as part of everyday work practices. Key communication acts are those interactions through which the core work practices are accomplished or shared. A technology that mediates communication in a new manner is likely to be the subject of individual reflection and the site of developing expectations.⁸⁴

An individual's sense of whether or not a particular technology will facilitate key communication acts is central to the framing process. If a tool is expected to enable key communication acts, it is framed as helping work practices and experienced as bolstering a salient occupational identity. This sense is not static. Linden attorneys assumed that the BlackBerry would enable key communication acts because they felt they needed to be available to international colleagues during 'off hours.' The attorneys assumed that the BlackBerry would provide easier access to email, a medium they already took for granted as an important aspect of performing their job. The language they used to describe their jobs and experiences as lawyers at Linden revealed a high degree of alignment among individual lawyers in both work practices and occupational identity. Such similarities contributed to individuals developing converging technological frames regarding their expectations of the BlackBerry.

Sales representatives also embraced a strong occupational identity, but one distinct from law. Sales representatives at Linden often came from prior jobs in shoe or apparel sales. They described themselves in terms of a shared idea of what it means to be a salesperson, often referring to personality traits and core competencies. The occupation of sales carries a strong identity that many described as important throughout their working life. Regardless of this shared occupational identity, certain factors within Linden's sales force engendered distinct

⁸⁴ Although individual reflection was stimulated during an interview, several people mentioned that they had been thinking about the potential ramifications of the BlackBerry prior to being asked to sit down for a formal conversation.

perspectives on what it is to be a sales representative. Due to the variance in daily work practice, individual sales representatives might have enacted a generalized shared identity as a salesperson but experienced that role quite differently on a day-to-day basis.

Sales representatives differed on the type of shoes they sold, the regions they traveled, the managers they reported to, and the nature of their customer accounts. All of these factors affected how individuals understood their jobs and work practices. These data revealed that a key influence on how sales representatives approached a new communication technology was the nature of their accounts. If the job is to sell, understanding the preferences, whims, and expectations of their customers is important to success in the organization and to identity as salespeople. Different daily work practices and communication acts are effective in selling to a large department store chain, a high profile independent fashion boutique, or a small independent shoe store. Different types of customers have different orientations to the products that Linden sells. They engage in different types of forecasting and long range strategic budgeting. They respond to different communication styles.

These distinctions were crucial to understanding how occupational identity merged with daily practice and informed how individuals oriented themselves to the BlackBerry. Many accounts did not have regular access to email. Some chose to communicate primarily via email. Therefore, individual sales representatives' sense of how the BlackBerry would align with their core communication acts was highly dependent on the nature of their customer accounts. These differences contributed to the creation of diverging technological frames of reference that initially emerged within the sales force.

Overview of initial framing processes

Figure 3 depicts the process through which individuals develop an initial technological frame of reference within a situated social and organizational context. Prior to using a new

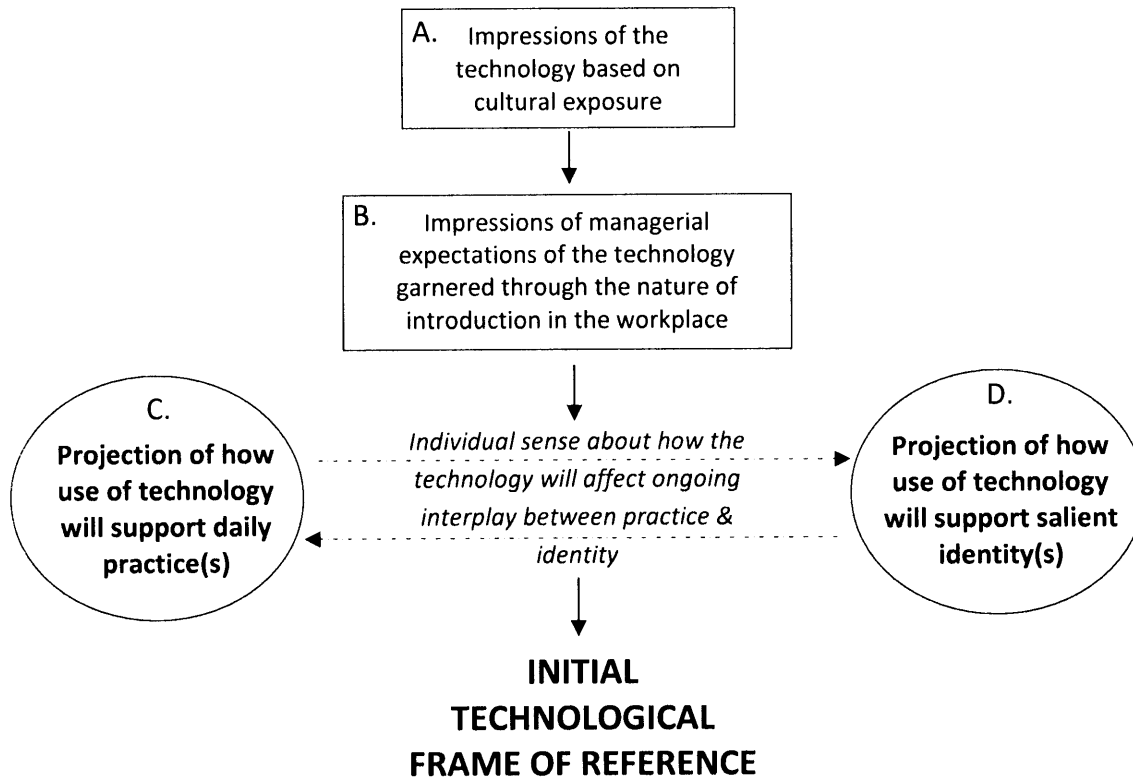
technology, or even imagining themselves with the technology, people carry a general impression of what the tool is and what it does (box A). Assuming that an individual has not acted unilaterally and purchased a tool personally,⁸⁵ such impressions are likely to remain vague and indistinct until an individual discovers he or she is slated to receive the technology.

When a technology is provided through the workplace, the nature of introduction is a key aspect of how potential users will initially interpret the device (box B). The power dynamics and social visibility of organizational contexts imbue the introduction of any technology into the workplace with symbolic power. While a group of individuals may be exposed to the same introduction, their initial technological frames of reference may be quite different because potential users will translate their emerging sense of the technology into an estimation of how the specific tool might relate to their daily lives.

Prior to use, and in the early stages of experimentation, individuals build on their sense of the general cultural understanding of the device and impressions of managerial expectations. They orient to the tool via their sense of how it might enable or constrain attempts to accomplish daily work practices (circle C) and project and maintain salient identities in the workplace (circle D). This interplay between projections of how a tool might, or might not, enable one to *do* a job and *be* the type of person who succeeds in a job is key to emerging technological frames of reference. Over time, these frames will be challenged or upheld. Frames might shift as the user's experience of interacting with a technology changes their estimation of its usefulness. Frames are also affected by social norms that emerge and shape the symbolic moves available for asserting and upholding salient identities via the technology.

⁸⁵ There were no examples in this dataset of people carrying a wireless email device with connectivity to a Linden email account prior to receiving the BlackBerry through Linden.

Figure 3: Developing an initial technological frame of reference



Unpacking the process of initial technological framing in the legal team and sales force at Linden provides several insights. First, these data suggest the specific elements that shape how an initial technology frame of reference emerges.⁸⁶ This examination of the process underlying technological framing contributes to work on the implications and ramifications of frames on decision making (Kaplan 2008), use of new technologies, (Orlikowski and Gash 1994) and political contests that emerge as groups with differently aligned frames interact in the workplace (Davidson 2002).

⁸⁶ I would not argue that these domains are exclusive or exhaustive. Rather, they are a compelling addition to research on the origin of technological frames of reference.

Further, this work contributes to current literature by tracing how technological frames of reference can shift dramatically over time. Initial frames set the stage for use. Such enacted practices then become the building blocks of social norms. Nevertheless, this evolving process may be experienced as contrasting with a user's initial interpretations. If someone is initially positive about a new technology they are more likely to interact with the device unreservedly and integrate it into daily life. By embracing the tool they unconsciously contribute to shared expectations of constant use. On the other hand, if someone is initially ambivalent or negative they will ease in to use, enact boundaries when possible and contribute toward shared expectations of limited use.

Because the sales force initially saw the BlackBerry as a potential means for surveillance, individuals took pains early on to limit use of the device. Therefore, the group did not develop expectations of increasing availability. Counter-intuitively, sales representatives' early ideas of managerial surveillance translated into a shared positive experience of the tool. In contrast, the generous, respectful, and carefully crafted message received by the legal team encouraged users to embrace the device without the critical perspective expressed by many of the sales people. Also counter-intuitively, this initial willingness to embed the BlackBerry into daily life outside of the office set the stage for increased expectations,⁸⁷ eventual frustration and personal costs.

⁸⁷ Although Linden attorneys did not use the language of "managerial surveillance," their descriptions of increased expectations by superiors and clients implied that 'surveillance' became a salient aspect of their experience with the BlackBerry.

Experiencing BlackBerrys: Law vs. sales

Evolving social contexts

As people employ a new mode of communication they affect their own communication landscape. Individual users must figure out how to communicate given the character of their social affiliations, professional identity, work practice and organizational structure. Each communication act is symbolic as well as transactional. People create expectations. Groups develop norms. Social pressures affect individual choices and the patterns of use that evolve over time. Orienting frames may guide users down a particular path of understanding and approaching a new communication medium. This understanding evolves as users receive feedback from their own experience, the experience of others, and the reactions of personal and professional communication partners. Groups develop different cycles of expectation and use. Key aspects that informed the shape and character of these cycles at Linden are outlined in the following sections.

Individual choices regarding when and where to check and respond to email via a BlackBerry are influenced by social expectations. While most behaviors are socially negotiated, checking and sending emails is inherently a social act. Initially, Linden attorneys spoke about 'my relationship to the BlackBerry and 'my choices about how 'I' use the device. Over time they became more and more likely to reference the expectations of others as moderating these choices. Assumptions evolved into shared norms as individuals engaged in social negotiations.

When individual users take for granted that others in a communication network share their assumptions regarding appropriate use of the BlackBerry, they recognize this shared understanding when choosing how to act. Those who value the opinion of their social counterparts will likely choose to act in accordance with their sense of shared expectations. Norms are always subject to evolution as individuals may choose not to act in accordance with the shared expectation. However, once social norms have developed and become embedded in

an individual's understanding of his or her social context the choice to act otherwise becomes a symbolic rejection of the group.

Email practices and identity assertions

Email communicates a wealth of information beyond the text of a message. How quickly someone responds to a query, how late at night they appear to be available, or how many email addresses they include in the 'cc' field—all communicate contextual information to email interlocutors. Some may interpret communication patterns as indicative of the 'type' of person they are interacting with. These data reveal that Linden BlackBerry users felt pressure to communicate in a manner that they believed upheld a certain image. Lawyers wanted to appear responsive in order to reaffirm their commitment to what they assumed to be the 'professional' elements of being a lawyer -- client service and availability. Many sales representatives rejected immediate responsiveness, but for similar reasons. These BlackBerry users felt that constant responsiveness to email would imply that they were more concerned with 'busy work' than building the necessary connections to sell. From the perspective that enacting a social identity involves ongoing projection and response, email communication becomes a forum for both projecting and responding to assertions of self.

Distinct practices develop within different communication networks. Different jobs require varied information to be transferred. Groups develop norms and patterns regarding the appropriate medium, temporal spacing, and expected practices. The identity assertions that become layered into email practices depend on shared communication patterns. Who is receiving email messages and whether that person is a direct recipient or a cc'd viewer of the message affects the social process of developing shared assumptions regarding BlackBerry use.

Visibility and communication practices

One aspect of communication practices that informs the development of shared assumptions is visibility of communication acts. Linden attorneys often cc'd their direct superior, and each other, when communicating with internal clients or external counsel.⁸⁸ This practice satisfied a reported need to cover one's bases. Further, individuals asserted that large ongoing projects required that numerous people were kept 'up to speed' through copied email messages. The unintended ramification of this practice, in addition to its contribution to their email volume, was that individuals were aware of the email behaviors of their immediate colleagues.

Such visibility set the stage for the attorneys to develop shared assumptions. Linden sales representatives, in contrast, often received messages from their superiors in a group format but would reply in a one-on-one manner. Email messages sent to customers or accounts were also typically messages between the sales representative and the buyer.⁸⁹ Therefore, not only did the sales force lack the motivation to project an 'always on' image from an identity perspective, they also did not create a forum that revealed such email patterns to each other. Such a forum evolves through an interplay of individual choice and habit (such as cc-ing people for symbolic reasons), social expectations (such as colleagues or a superior wanting to keep tabs on the communication of others), or work necessity. Without such a forum among sales representatives, visibility could not contribute to shared practices.

Explicit discussion and locus of responsibility

Social negotiations regarding the appropriate use of BlackBerrys take place in a number of ways. People may engage in discussion focused on creating explicit norms and outlining expected behavior. They may develop an implicit understanding through joking, informal

⁸⁸ 23% of the 183 'off hours' BlackBerry messages reported during Phase II interviews were messages to a 'client' (internal or external, local or international) with multiple Linden attorneys copied on the messages.

⁸⁹ If another Linden employee was copied on a message to an account it was either the account's customer service representative or the boss of the sales representative. No examples in Phase II data revealed sales representatives copying each other on emails with accounts.

comments, or simply noticing and monitoring the behavior of others. The manner in which groups establish norms affects the nature of shared norms as well as individuals' sense of the normative environment as directive or coercive. Linden attorneys attempted to alter the direction of evolving norms through explicit discussion. Enconced in a protected space at an off-site strategic planning retreat, the legal team discussed the BlackBerry and evolving expectations around it. Several on the legal team admitted that they were experiencing difficulty satisfying what they felt to be intensifying expectations regarding their connectivity to email via the BlackBerry. Each attorney described this discussion as an engaging and honest dialogue about the pressures of client service when communicating with international colleagues. Nevertheless, the team left the retreat with a variety of perspectives about what contributed to evolving expectations but none had a clear idea about how to address the issue.

After returning from the retreat three attorneys emphasized that, given their social and organizational role, it was up to them as individuals to negotiate connectivity with specific clients. The team apparently did not take a broad perspective on how to address a shared social context of constant availability. Rather, individuals were told that they had the 'right' to push back and establish their own boundaries. They were assured that they should not take the email patterns of their boss, the General Counsel, as implicit expectation. Yet, given the alignment between strongly held occupational identity and team collegiality, individuals continued to feel that they should not challenge client (or each other's) expectations. Over time, all emphasized that they felt the expectations of the General Counsel had evolved more and more toward constant availability. And, given the close personal connections within the group, individuals were hesitant to disrupt the working patterns of their *friends* (i.e. attorney colleagues) through lack of responsiveness.

In contrast, sales representatives rarely spoke to each other about expectations regarding the BlackBerry. They did not hold any explicit discussions. And, aside from derisive comments toward those who chose to display the device, they did not appear to engage in informal discussion or joking regarding usage patterns. The professional identity and work practices of sales representatives allowed them to fall into patterns of communication that did not

incorporate shared expectations of increased availability. Rather, use of the BlackBerry enabled efficiency and increased personal time for those who chose not to use it during off hours yet were able to get 'ahead' on emails during business hours.

Organizational position and relationship to clients/customers

Linden attorneys initially assumed that their structural level in the organization, their social prestige, and the collegial nature of the firm would allow them to act as autonomous agents in charge of their own communication practices. This sense was bolstered by the messages projected by leadership during their introduction to the device. However, occupational identity, work practices, and team structure soon undermined this expectation. While valuable in terms of individual identity and monetary reward, professional prestige can be experienced by individuals as sources of social constraint.⁹⁰ Linden attorneys discovered that the very elements of their job that they assumed would protect individual autonomy served to limit their ability to disconnect or choose communication patterns significantly different from those of their colleagues.

As in-house legal counsel, Linden attorneys are a constant drain on the bottom line of the company. In discussing their orientation to client service, several attorneys noted that they felt some pressure to justify their presence and cost to internal clients.⁹¹ This perspective intensified a desire to appear 'on top' of incoming emails and actively engaged in providing service. It caused tension in attorneys' ability to prioritize demands. Individuals described a

⁹⁰ Scholars have documented the relationship between power and prestige and commitment and connectivity to professional life. The more a job takes on the trappings of 'professionalization' and accompanying social prestige the more individuals are compelled to incorporate their public role into their private self and 'private time.' Zerubavel, Eviatar. 1979. "Private Time and Public Time: The Temporal Structure of Social Accessibility and Professional Commitments." *Social Forces* 58:38-58.

⁹¹ This perspective was expressed by all attorneys, including the general counsel. The three more junior lawyers who had to ask for the device after the leadership retreat did not appear to experience increased pressure to prove their need for BlackBerrys. In fact, these three attorneys were some of the most vocal in expressing frustration over time.

constant internal debate about how best to address all of the projects on their 'to do' list while making every client feel he or she was their top priority.

In contrast, Linden sales representatives were acutely aware of their role as revenue drivers. This was revealed in numerous contexts: discussing the pressure involved in selling during difficult financial times; admitting frustration with designers and the popular appeal of the product; and asserting a firm belief that they should be left alone by superiors as long as they were meeting the requisite sales number. Their top priority was clear – to sell shoes or apparel. Linden sales representatives saw themselves as on the 'front line' in terms of generating revenue and keeping the firm robust. This perspective generated significant pressure, but it did not lend itself to a sense that internal patterns of email communication should be emulated.

Sales representatives worked out of their homes and experienced their jobs as separate from headquarters, both symbolically and physically. Therefore, email requests from internal colleagues (superiors, designers, marketing, etc.) took on a distant character. Describing incoming messages, sales representatives were quick to distinguish communication from accounts, or about specific issues with accounts, from 'general' communication. Sales representatives were regularly on the road. They assumed that all of their email interlocutors understood that their top priority was to address customer issues and were comfortable putting off requests not directly related to sales numbers. Therefore, shared expectations of constant availability among internal colleagues were actively rejected and were not established among sales representatives. Further, sales representatives generally described their accounts as not expecting expanded communication beyond traditional business hours. Thus, a focus on customer service did not translate into expanded email availability.

The Linden sales force operated in a hierarchical pyramid that offloaded aspects of the sales endeavor to those occupying different positions in the force. The daily practices of a regional manager were different from those of an account executive. Because individuals understood the specific responsibilities required to perform their position in the sales force, individual sales representatives did not feel an overwhelming pressure to emulate their superiors. Account executives regularly discussed the difference in expectations that accompanied a move into

management (anyone not on the front line in charge of a suite of accounts). Sales managers corroborated this impression when they reported engaging in increased email communication with their BlackBerrys and experiencing greater expectations of responsiveness while on the road.⁹² Still, these managers (who also came from a background of field sales) continued to maintain personal boundaries. They were quick to emphasize that the BlackBerry relieved stress while on the road and saved time in the evenings by off-loading necessary communication to business hours.

Like the attorneys, Linden sales representatives saw themselves as autonomous agents. Unlike the attorneys, this aspect of their professional identity was not undermined by a desire to be continually responsive and available to internal colleagues. Sales representatives felt a compunction to be responsive to their customers, but their customers rarely worked or communicated during 'off hours.' As structurally isolated individuals working out of their homes, sales representatives were practiced boundary setters. Consequently, the social process of negotiating the potential for constant accessibility via wireless email took on a different character in sales than it did in law.

Table 6 outlines the differences between Linden attorneys and Linden sales representatives in terms of their organization position and relationship to clients and customers.

⁹² Because I do not have email data from before and after the BlackBerry I cannot support this impression empirically.

Table 6: Organizational position and relationship to clients/customers - Law vs. Sales

	Position in Linden hierarchy (rankings from: 2-14)	Relation to revenue	Relation to client/customer	Client/customer work patterns	Client/customer communication patterns
LAW	9 – 11	Revenue depleting.	Advisor or counselor.	Internal clients are heads of business units and senior officers in the company. Regularly work during 'off hours.' Work with international clients.	Clients regularly communicate during 'off hours.'
SALES	2 – 11 (typical account executive at level 6 or 7)	Revenue generating	Negotiator, annoyance, collaborator, friend. Power dynamics shift and relationship changes depending on demand for product.	Customers rarely work during 'off hours.' Small stores close and buyers for large stores work traditional hours.	Customers rarely communicate during 'off hours.'

Distinct patterns of BlackBerry use

Attorneys initially experienced their patterns of use as stemming from individual choice. Over time, the legal team created a normative environment that restricted the experience of choice. While the team had been accustomed to some email connectivity during hours out of the office, the temporal and physical locations of use expanded dramatically with the BlackBerry. As assumptions of availability became taken for granted they evolved into shared norms of availability that were described by individual attorneys as restrictive and occasionally coercive.

After two years with the BlackBerry, Linden attorneys described similar usage patterns. All of them checked their BlackBerrys at least once every other hour (and often every 15-30 minutes) from the time they woke up in the morning until they arrived at work and as soon as they left

work at around 6pm until 10pm or 11pm in the evening. They assumed that others were using the device in the same way (such assumptions were confirmed when individuals received 'off hours' messages from colleagues) and sensed that they were expected to maintain this level of availability. In essence, each was creating and upholding a norm of regular availability for approximately 15 to 16 hours a day.

In contrast, the majority of sales representatives felt that as long as they hit their sales numbers their managers wouldn't care if they were instantly accessible via email. Linden sales representatives did not initially engage in similar patterns of BlackBerry use. After years with the device they continued to enact distinct usage practices. Some people integrated it into life beyond traditional business hours. Many chose to use it while they were on the road but turned it off at home. Some sales representatives avoided all access to email in the morning and evening and others checked email occasionally on traditional computers in their home offices.

The Phase II data I collected supports the assertion that, in general, Linden attorneys established distinct patterns of BlackBerry use from those of the Linden sales representatives. Tables 6 and 7 outline the average number of emails that Linden attorneys and Linden sales representative opened or sent on their BlackBerrys during traditional working hours and non-working hours.⁹³ Phase II data was collected after individuals had been using their BlackBerrys for at least one year, so it can be assumed that these data do not reflect initial excitement or hesitancy toward the device. While only capturing a slice (2 – 4 days) of BlackBerry use, in aggregate, these data represent a semi-stable pattern of email behavior among communication partners.

⁹³ 8am to 6pm are generally considered traditional working hours in the United States. These hours also correspond with the typical working day in the office as reported by Linden attorneys.

Table 7: Linden Attorneys – BB messages opened/sent

	<i>Number of users</i>	<i>Number of Days</i>	<i>Average per day</i>	<i>Range</i>	<i>Standard Deviation</i>
'Off hours' weekday	7	11.5	11	4 - 24	8.7
'Off hours' weekend	7	11	12.4	1.5 – 21.5	10.9
Business hours	7	12	1.8	0 - 4	2.4
<i>*'off hours' counted as before 8:00am and after 6:00pm</i>					

Table 8: Linden Sales – BB messages opened/sent

	<i>Number of users</i>	<i>Number of Days</i>	<i>Average per day</i>	<i>Range</i>	<i>Standard Deviation</i>
'Off hours' weekday	12	33.5	1.8	0 - 11	3
'Off hours' weekend	12	14	1.7	0 – 5.5	2
Business hours	12	24.5	13.6	.4 – 48.8	12.7
<i>*'off hours' counted as before 8:00am and after 6:00pm</i>					

The difference in usage patterns between law and sales is apparent. Sales representatives are clearly using their BlackBerrys during business hours to keep up with emails during time on the road. Linden attorneys, on the other hand are using their BlackBerrys before and after 'work hours,' and throughout the weekend. While Linden attorneys sent and received numerous emails during the day at work, this email activity took place on their office computers and did not reflect the expansion of availability that was reported to be influenced by BlackBerrys.

Second, and somewhat less straightforward in an aggregate format, is the difference in convergence of usage patterns between law and sales. All interviewees were asked whether the data collected during a Phase II interview reflected their typical email practices on the BlackBerry. These responses reveal that the standard deviation in numbers of emails addressed by individual attorneys and sales representatives have different root explanations. Three of the seven attorneys were emphatic that the email patterns reflected during the Phase II interview underrepresented their general experience with the BlackBerry. These three interviews occurred within a few days during a slow time for the legal team and were responsible for the low points in the range of email data.⁹⁴ The range in email numbers in the legal team represents a temporal difference between a normal and particularly slow time in the department.

The sales representatives reported a greater range in numbers of emails sent and received on BlackBerrys than did the attorneys. None of these interviewees said that the email patterns they related during the interview were different from his or her norm. Therefore, it can be assumed that this range reflected individualized usage patterns. Some sales representatives used their BlackBerrys to send and receive emails far more than others. Those users who noted that they felt they used the BlackBerry more than their colleagues often attributed these patterns to personal use or the nature of their accounts. The specifics of these emails revealed that personal use was a factor; some, generally younger, individuals were sending and receiving social messages from colleagues, or friends external to Linden during 'off hours.' Internal hierarchy also appeared to play a role in emails sent during 'off hours' as those in management roles were occasionally sending and receiving messages from their superiors during 'off hours.' Very few actual emails were sent to or from accounts (8% of all off hour emails included an account. See footnote #75) so this variable was not obvious in these data.

⁹⁴ The slow period is also why the attorneys agreed to fit in an interview that took approximately 2 hours to conduct.

Process of social structuring and engagement

The social process of technological adaptation to the BlackBerry is a story of how people create, maintain, and shift ties with each other. The nature of these ties emerges in the interplay between the features of a communication medium, the creation and evolution of individual frames and actions, and ongoing social structuring. Reflecting on their experience with the BlackBerry after three years of use, both Linden attorneys and Linden sales representatives were surprised about their orientation toward, and experience of, the BlackBerry. In retrospect, experiences of the device within each group clearly evolved from initial technological frames of reference, individual acts of use, professional identity, and daily work practice. In prospect, it was difficult for users to project how their individually held views of the device would set the stage for social structuring. In their attempts to be a certain type of person, and accomplish a certain job, they did not initially understand how they were orienting their use of the BlackBerry along a certain trajectory.

After three years with the device, the Linden legal team created an expanding cycle of expectations. Individuals felt they were required to be available and responsive to email from colleagues and clients via their BlackBerrys throughout evenings and weekends. They described this as increasing daily stress and contributing to a general feeling that they could never truly disconnect and focus on other aspects of life. The Linden sales team, on the other hand, developed a sustaining cycle of expectations. Individuals described being engaged with Linden colleagues and their customer accounts through the BlackBerry during traditional business hours. They did not develop a norm that encouraged individuals to extend this accessibility. After three years with the device, all sales representatives (to varying degrees) asserted that wireless email allowed them to better serve their customers and increase their individual efficiency.

Examining how either Linden attorneys or Linden sales representatives engaged with their BlackBerrys would offer insights into the social process of structuring and engaging a new technology. Comparing the two groups enriches this endeavor and reveals distinctions that lead toward more nuanced understanding. One group experienced the potential for expanded access to email as challenging their autonomy and increasing stress. The other experienced the same capacity as increasing individual efficiency, personal time and well being.

Addressing initial research questions

The first of the two research questions that oriented this study asked, “*How is the potential for expanded access to wireless email enacted within different social contexts?*” These data reveal a complex process of individual framing and social structuring that involves the interplay between individual interpretations, individual actions, shared expectations and personal consequences. Table 9 is an overview of how Linden attorneys and Linden sales representatives experienced the BlackBerry differently over time. Both the attorneys and the sales people engaged in an ongoing process of framing, using, developing shared expectations, and experiencing personal consequences of BlackBerry use. However, this process evolved differently within each group. Understanding this difference enables broader understanding of the mutually constituting relationship between individual practices and social contexts.

The experience of Linden lawyers suggests that individuals who develop a positive orientation toward a tool are likely to integrate it into daily practices in a relatively unreflective and unrestricted manner. Such practices are easily susceptible to expanding expectations of use among those in a tight communication network and can lead to negative personal consequences even among collegial and friendly peers in the workplace. In contrast, the experience of Linden sales people underscores how those who are initially wary of a new tool are more likely to integrate it slowly and cautiously in daily life. Such practices are less likely to lead to a social dynamic of shared expectations regarding proper use and allow individuals to develop a personalized relationship with the technology. As individuals interact with a tool from

a position of self-determination they will likely shift in their initial estimation of the device. Linden sales people, for example, began to appreciate the functional capacity of the BlackBerry and reaped personal gains by using the device. Ironically, the Linden attorneys, who felt that management was initially respecting their autonomy, found themselves in a position of social constraint and individual cost while the sales people, who were suspect of managerial motives, created a social dynamic that allowed individuals to enjoy a sense of greater effectiveness during work hours and more personal time during 'off' hours. Mitigating and intensifying factors are discussed below.

Table 9: BlackBerry experience over time - Law vs. Sales

	Initial Frames	Use	Norms	Consequences
LAW	<p><i>Converging and positive initial frames</i></p> <p>Explicit positive introduction.</p> <p>Projection that use of the BlackBerry will <i>enhance</i> professional identity.</p> <p>Projection that use of the BlackBerry will <i>enable</i> daily work practice.</p>	<p>All lawyers <i>choose</i> to integrate the device into daily life during 'off hours.'</p>	<p><i>Expanding cycle of expectations</i></p> <p>Norms of connectivity during 'off hours' develop making it difficult for any single individual to change patterns of use.</p> <p>Rapid response to email becomes a symbolic act assuring respect and commitment to communication partners beyond traditional work hours.</p>	<p>Inability to disconnect.</p> <p>Damage to personal relationships.</p> <p>Greater stress.</p>
SALES	<p><i>Diverging, ambivalent and negative initial frames</i></p> <p>Opaque transactional introduction.</p> <p>Projection that using the BlackBerry will <i>undermine</i> professional identity.</p> <p>Projection that using the BlackBerry will <i>constrain</i> daily work practice.</p>	<p>The majority of sales representatives <i>choose not</i> to integrate the device into daily life during 'off hours.'</p>	<p><i>Sustaining cycle of expectations</i></p> <p>Develop norms of different usage patterns, limited connectivity during 'off hours.'</p> <p>Individuals feel free to alter patterns of use over time.</p> <p>Rapid response to email enables efficiency during the day but does not become a symbolic proxy for competency.</p>	<p>Greater ability to disconnect.</p> <p>Enhanced efficiency.</p> <p>More personal time.</p>

The second research question that oriented this research asked, “What are the *conditions under which* people experience different consequences from the use of wireless email.” In other words, what are the key elements that inform how individual use patterns evolve in relation to their identity, their practices and their relationship to a social and communicative network? As implied in Table 9, these findings suggests that the structural and identity elements that affect ‘off hours’ BlackBerry usage are the anticipated expectations of clients, peers and superiors as well as the alignment between occupational identity and constant availability. Each of these elements, as well as mitigating factors that affect the strength of each element, is discussed below.

Client or customer expectations reinforce extended BlackBerry use depending on the client/customer communication patterns and the pressing nature of ‘off hours’ email messages. If, as in the case of the lawyers, clients send emails during what is ‘off hours’ for the email recipient (either due to extended patterns on the client side or differences in time zones) they bolster the strength of the reinforcing loop between client/customer demands and expanded BlackBerry usage. If clients express pressing demands and communicate that a message must be addressed before the next business day, an individual’s sense of responsibility for staying ‘in the loop’ for extended hours intensifies. Table 6 provided details of the differences in client/customer relations for Linden attorneys and Linden sales representatives.

Peers also influence each other. The expectations of colleagues are another key element that can serve to increase ‘off hours’ BlackBerry use. The visibility of communication patterns amongst peers, as in the case of Linden attorneys, strengthens this dynamic. The expectations and actions of superiors also influence the actions of their subordinates. Reinforcing expectations from a boss to increase BlackBerry usage are powerful individual motivators. The degree to which a boss expects expanded access is affected by the extent to which they have ‘objective’ performance measures that enable straightforward evaluation of subordinates. In the case of Linden sales, the emphasis placed on meeting an objective sales number mitigates the extent to which managers associate expanded BlackBerry use with job performance. In a

profession such as law that is subject to more ambiguous metrics, communication behavior can project commitment or dedication to a role, and become used as a proxy for competency.

Finally, occupational identity can mitigate or intensify an individual assumption that constant availability via email is required to perform a job well. If 'client service,' interpreted as constant availability and quick response, is a key element in occupational identity it will serve to reinforce 'off hours' BlackBerry use. If, however, individual independence is a core element of occupational identity it will serve to attenuate the desire to be constantly connected to email.

At Linden, the lawyers had little sense of how the sales representatives engaged with their BlackBerrys (several did not even know that the sales force had these devices) and vice versa. Tracing the process of individual framing, ongoing communication practices, and social structuring of the BlackBerry within distinct occupational groups reveals the structural similarities of the process across contexts. Further, this endeavor provides insight into the key elements that inform how a communication technology is experienced and used within a particular social, organizational, and occupational context.

Chapter 7: Conclusion

Email is not new to industrialized societies. Neither are technologies that enable constant mobile connectivity. All of the BlackBerry users in this study carried a cell phone prior to receiving the BlackBerry. All would check email throughout the day, and often in the evenings, on a laptop or desktop computer. Many had wireless enabled laptops and reported logging on to email while traveling for work or vacation. So, why did most of the participants in my research study describe the ability to send and receive emails on the BlackBerry as significantly affecting their work and life? Where does this passionate individual response come from? Users' animated portrayal of their experience of engaging with email via the BlackBerry testifies to the fact that the tool is experienced as distinct from a stand-alone cell phone or laptop. When users integrate email communication into the micro moments of daily life they are confronted with a wide range of psychological and social implications.

By combining ubiquity and mobility with asynchronicity and text-based communication, the BlackBerry enables people to stay connected to work in a manner that many frame as 'unobtrusive.' Experience of that tool is situational. One day the BlackBerry may cause stress. Another day it may relieve it. Likewise, a user may experience stress relief in the immediate moment of checking email, but describe feeling burned out and frazzled due to lack of time to disconnect or rejuvenate. Another user may find it stressful in the short term to be checking messages throughout the day, but appreciate more personal time away from email in the evenings. And in the act of checking email messages at expanded temporal and physical locations, users may feel *simultaneously* empowered, controlled, relieved and stressed.

Communicating through a handheld wireless email device requires constant mediation between individual choice and group expectations. The experience of wanting to connect, choosing to connect, being expected to connect, and feeling frustrated with constant connection are intricately interwoven sensations. BlackBerry users may simultaneously experience multiple conflicting orientations toward the device and the information it carries.

Long term experience with the tool is an evolving interplay between self and others, work and personal time.

Choosing when and where to engage with email via the BlackBerry involves making numerous decisions regarding how to integrate accessibility into daily life. At the same time, any email sent or responded to via the BlackBerry contributes to an evolving social dynamic and implicit negotiation with communication partners regarding shared expectations of availability and responsiveness. Provided by work, the BlackBerry can often serve as a conduit, bringing work-related queries into the more intimate temporal and physical spaces of daily life. As such, the device can instigate self-reflection on work/life balance, and what it is to be a good spouse, parent, employee, or other socially validated category.

The BlackBerry is a concrete tool that implies specific behaviors for a particular user, and, often, for user groups. It can serve to instigate and ground reflective thinking. For example, an individual noticing a dirty look from the dentist as he/she checks messages while being escorted into the chair may stop to reflect on the impression he/she might emit. A spouse complaining about his/her partner checking the BlackBerry during dinner might open the door for a larger conversation about priorities and energy spent focused on work. A manager sending out emails at 11pm on a Friday night might discover that several people respond immediately and decide to host a discussion about managerial expectations in terms of availability and responsiveness. "Do you turn it off during dinner?" "Do you take it into your bedroom?" "Do you use it during meetings?" "Why not?" These questions all relate to deeper issues that are often difficult to verbalize. BlackBerry use can prompt and open the door for such reflection. Because information and communication technologies mediate social relationships across time and space in new ways, they can become particularly powerful "evocative objects" (Turkle 1984) that inspire people to notice their relationships to physical or social worlds in a new light.

New technologies enable new experiences of connectivity. The many choices implied by managing constant connectivity have a cost. When disconnection becomes a preference rather than a technical necessity one has to decide when to 'check in' and constantly figure out how to respond to each waiting message. If BlackBerrys are used to intensify the pace and temporal

patterning of work-related communication, the difficulty of setting and maintaining personal boundaries increases. The stress of being disconnected in a social environment that expects connection may be greater than the daily stress of managing personal boundaries and choices of how to incorporate constant, 'unobtrusive' connection to email into everyday life. Carrying a BlackBerry can provide the stress-relief of keeping a pulse on what is 'going on' in one realm while intensifying the stress of always knowing what is 'going on.' BlackBerrys promise constant connectivity and individual distance from immediate interaction. No wonder these devices are so appealing to a western culture fascinated with the power of networks and connectivity yet firmly entrenched in an ideal of individual power and autonomy?

Limitations

This study focuses on two groups within the same organization. My analysis of how Linden attorneys and sales representatives engaged with the BlackBerry emerged from grounded experience in a specific context. This is both the strength and limitation of this study. Having an 'N' of two allows for comparison without overly sacrificing situated differences. Comparing two groups allowed me to engage in rich qualitative data gathering. I was able to embed myself in each group and feel confident that my analysis emerges from a nuanced understanding of life as a Linden attorney or sales representative. I was able to develop a detailed perspective of what motivated these individuals, how they saw themselves in terms of their peers and families, and the spectrum of work practices that oriented their daily lives.

I am confident that the key elements delineated in Chapter 6 represent the elements that influenced how individuals in the Linden legal team and Linden sales force engaged with the BlackBerry over time. I cannot claim that these elements will provide a comprehensive road map for understanding how *any* group of individuals within an organizational setting will engage with the BlackBerry over time. In order to examine the explanatory power of my findings, one would have to consider other organizational environments and the use of different communication technologies.

The insights from my work are also limited by my inability to observe individual practices with the BlackBerry. Linden attorneys did not use the device while in the office and I was unable to accompany them throughout their 'personal time' outside of business hours. Therefore, it was difficult to get a full picture of how they interacted with the device and to explore possible ramifications for their immediate physical and social environments. While I was able to observe several sales representatives on the road during business hours and get a better sense of how they fit the BlackBerry into everyday work life, I was not able to do so for the many different sales representatives and different accounts, or for an extended period of time. I was similarly not invited into the lives of sales representatives outside of official 'work' hours.

My Phase II interviews were structured in order to provide an understanding of BlackBerry practices in context. These interviews provided concrete data about specific communication practices and individual experiences of using a BlackBerry to send and receive emails. Nevertheless, like all interviews, these data suffer from retrospective bias. I attempted to minimize this bias by conducting Phase II interviews within days of the email patterns reviewed and referring to Outlook server data. Yet, even grounded and structured interview techniques cannot provide the types of data available via observation. I was unable to gather an impression of how others in the physical space of a BlackBerry user responded to their use of the device; immediate reactions to incoming messages; cues that inspired a BlackBerry user to check the device or send a message; or the immediate costs and benefits to having mobile access to email.

Contributions to theory

This research extends social identity theory by recognizing the role of information technologies in contributing to the development, projection and enactment of social identities. Individuals' sense of self will inform how they first interpret and orient themselves to a new mode of communication. Identity informs interpretation. And as soon as individuals attempt to

communicate with and through a new communication technology, that tool becomes implicated in their identity performance. Social identities are formed and negotiated through interaction. Any tool that affects the nature and possibilities of interaction affects the social stages on which identity is created, projected, and maintained. Screen and keyboard size make it likely that people will write different emails on a BlackBerry than they would on a laptop. The size of the device and potential for constant connectivity allow people to carry it with them and integrate it into daily life in new ways. New communication practices affect what is communicated. If identity is established and maintained through interaction, new patterns of interaction imply new identity acts. Additionally, a BlackBerry is easy to wear, or hide, as an embodied and symbolic prop. Wearing the BlackBerry can be translated by others as a sign of connectivity, instantaneous response, respect, prestige, or 'dorkiness.' Regardless, it is an identity assertion that is being interpreted by others.

My research also illuminates the link between practice and social identity. I suggest that practices are informed by the desire to project a certain identity and identity claims are made and instantiated through practice. Communication technologies mediate and inform this process. The BlackBerry becomes a vehicle through which people engage in work practices in the form of communication acts. The ability to work is often intimately tied with the ability to communicate about the work. Therefore, studying actual practices with the BlackBerry provides a lens into the ongoing interplay between identity and practice.

These data reveal that users at Linden drew upon cultural context, organizational messages, and individual projections in formulating an initial technological frame of reference. They initially framed the BlackBerry in terms of their understanding of how it might affect the ongoing interplay between enacting a salient identity and engaging in work practices. My research contributes to the work on technological frames by describing dramatic shifts in framing over time. Individuals frame and continuously re-frame their sense of a device in terms of individual experience of use, their evolving social context of norms and expectations, and ongoing personal consequences. This work is distinctive in that it highlights the powerful and

counterintuitive ways that frames can shift substantially over time, and the consequences of this for individuals' work lives and sense of self.

Contributions to practice

Constant interaction with email reduces immediate uncertainty about changing information and expectations.⁹⁵ Being the first to have access to a piece of information may yield a sense of power. Some users described a rush of anticipation when noticing (either through a buzz or blinking red light) that a new message has arrived in their inbox.⁹⁶ Nicola Green discusses the psychological thrill of social connection as mediated through information and communication technologies. According to Green,

The pleasure for media engagement combines with elements of anticipation, consummation and fulfillment/release (although the afterglow often includes an element of anticipation for the next episode, access, communications etc.). The desire for consumption is heightened in circumstances where the individual sees themselves as part of an imagined community, engaged in cultural construction and exchange. (Green 2002b pg. 49-50)

⁹⁵ While my research does not delve into cognitive processes, the reduction of uncertainty has been touted in the psychological community as a driving force influencing human behavior Afifi, Walid A. and Judith L. Weiner. 2004. "Toward a Theory of Motivated Information Management." *Communication Theory* 14:167-190, Inglis, Ian R. 2000. "The Central Role of Uncertainty Reduction in Determining Behavior." *Behavior* 137:1567-1599.. Organizational assimilation theorists also posit that individuals constantly engage in communication with colleagues in order to reduce the uncertainty of what is expected and rewarded in a particular environment. This knowledge is expected to reduce stress, heighten organizational assimilation and improve the commitment one feels and contributions one extends to the organization Waldeck, Jennifer H., David R. Seibold, and Andrew J. Flanagin. 2004. "Organizational Assimilation and Communication Technology Use." *Communication Monographs* 71:161-183.

⁹⁶ Ironically, the very capacity of BlackBerrys to speed up communication may serve to intensify the psychological desire for more information. It has been found that when individuals anticipate future events they shift their 'temporal reference point' such that unexpected waiting increases irritability and discontent. Any delay of consumption causes immediate sensations of deprivation that have been shown to encourage impulsive behavior Loewenstein, George F. 1988. "Frames of Mind in Intertemporal Choice." *Management Science* 34:200-214.

The sense of connection inspired by an inbox of new messages is alluring. Such dynamics may motivate individuals to check their BlackBerry frequently and act promptly toward 'important' incoming messages.⁹⁷ The practices of these 'self-interested' users affect everyone in a communication network. In their attempts to successfully do a job and enact a valued sense of self, individuals may be motivated to stay constantly connected via BlackBerry. Often this behavior is seen as 'keeping up' rather than contributing to communication intensification, but it is typically both. Individuals strive to avoid ambiguity and uncertainty by actively negotiating, testing, and learning the informal rules of interaction developed and shared by a communication network. The tension between individual action and social dynamics may encourage groups to institutionalize action focused on short-term rewards in a manner that affects long-term outcomes (Berger and Luckman 1966). Individual micro-actions carry unintentional consequences that feed back and set the stage for future actions (Giddens 1984). Potential long-term effects of engaging in near constant connectivity with wireless email include increased stress, burn-out, inability to disconnect from work, loss of time for in-depth analysis or reflection,⁹⁸ and quality of communication and decision making.

Practical implications of this research involve exposing the links between individual experience and social context. The social dynamic is often invisible to those acting within its bounds. However, reflection and collective action can enable a group to shift their shared perspective toward acknowledging the social influence on individual life. By recognizing the structural pressures (such as a focus on responsiveness as proxy for client service or

⁹⁷ What is considered by a user to be an 'important' message is once again a product of individual interpretation, social norms and organizational context. In past research with lawyers, I heard repeatedly that they only felt a need to respond to "important" messages. When pressed to describe what warranted this label I discovered it was *any* message addressed directly to them. The amount of broadcast and cc'd messages made this direct contact relatively rare and therefore "important."

⁹⁸ According to Robert Hassan, "In this accelerated ecology, the creation and application of reflexive knowledge and reflexive evaluation becomes increasingly difficult. There is simply less time for it - and less perceived need for it in an increasingly competitive and profit-driven social-economic system." Hassan, Robert. 2003. "Network Time and the New Knowledge Epoch." *Time & Society* 12:225-241.

competency) that inform communication networks, groups can address where the burden for managing communication patterns lies. This requires a genuine desire by management to change communication and work practices. Mixed messages or implicit expectations that reward expanded availability will undermine explicit attempts to drive change in individual communication practices.

In a group like Linden's sales team, structural pressures did not align such that individuals were motivated to create escalating communication patterns. Therefore, this group did not engage in discussion about the role of BlackBerrys in their shared work endeavor. They did not engage in explicit dialogue about the experienced pressure of attempting to balance work and personal life while connected to email via the BlackBerry. They did not need to be consciously reflective or create shared ground rules in order to manage the potential of constant connectivity.

The experience of Linden sales representatives does not appear to be the norm. Past research suggests that an experience of tightening concertive control (Mazmanian, Orlikowski, and Yates 2006; Middleton 2007) with technologies that enable expanded availability is much more common. The Linden legal team is a particularly arresting example of how the potential for connectivity can become an expectation of connectivity. Unlike many examples in the corporate world, Linden attorneys were provided the device under what they thought to be a genuine effort to enable individual autonomy and flexibility. They did not expect the BlackBerry to enhance expectations of availability and they attempted to discuss with each other the experience of connectivity as it became more challenging. However, the work practices and occupational identity motivating their use of the device were strongly aligned with patterns of use that expanded availability. These patterns eventually evolved into norms that implied negative personal consequences for the individuals motivated to uphold the social expectation.

In order for the lawyers to shift patterns of use they would need to see their dynamic as a social one. Their one explicit discussion regarding the challenging aspects of using a BlackBerry at their off-site leadership retreat did not embrace the social aspect of BlackBerry use. Attorneys were encouraged to individually take control of their communication acts and

actively negotiate, or push back, on specific email interlocutors. This advice does not acknowledge the power of social contexts to mediate identity assertions and shape individual rewards. Perhaps, once this social dynamic was recognized, Linden attorneys could create explicit normative practices for dealing with 'off hours' emails (for example, a shared understanding of expected response times, specific subject headings to signal expectations, technological interventions that disconnect during specific times, etc.). These practices would have to be continuously revisited with shared reflection to establish whether or not formal procedures were hindering the work or had become moot through the evolution of actual behavior patterns.

Future directions

In future research emerging from this study, I hope to examine such attempts at shifting social norms and individual communication practices. Research in a different field location where a tight network of communication partners is consciously attempting to shift existing expectations in order to encourage individual boundary setting and periods of disconnect might be ideal.⁹⁹ In numerous organizations, work practices, occupational identity and social norms align such that individuals feel compelled to engage in email practices with mobile devices in a manner that approximates ubiquitous connectivity. Over time, such work-driven communication patterns can become difficult for the individual to maintain (in light of family responsibility, personal desires, alternate work practices that demand time and reflection, or limits to human physiology, such as a need to sleep). Following individuals formally attempt to extract and change shared communication practices in a close work environment is an

⁹⁹ My current research at a large consulting firm is studying a top down change initiative. The goal of the initiative is to enable employees to take predictable time 'off' or disconnected from work one evening a week (Mon-Thurs). I am currently involved in watching this process unfold with Leslie Perlow and Jessica Porter from Harvard Business School.

important next step in tracing the relationship between communication technologies, individual perspective, individual practices, and social dynamics.

Other future directions involve attempting to unpack a possible relationship between work unpredictability and time 'on call' monitoring work related email. BlackBerry users regularly assert that they monitor email via their BlackBerry in order to be available if something unexpected occurs. However, such behavior may contribute to collective work practices that intensify the frequency of such unexpected episodes. If people begin to assume that their colleagues are constantly available by email, they may have less incentive to work together during business hours to triangulate, prioritize, and plan how to accomplish necessary tasks. This may lead to increased unpredictability, more time working during 'off' hours, and a felt need that in order to satisfy the vagaries of the 'work' (rather than a social dynamic) an individual must be continuously available via email.

On a more micro level, future research might explore the scope, scale and nature of time 'on call' or monitoring work via email. BlackBerrys and similar technologies are often heralded as enabling individuals to leave the office and experience more temporal and physical freedom while maintaining 'necessary' connectivity to email. Advertisements for such technologies project an image of professionals 'working' from the beach, the golf links, or their child's soccer game. These images imply that, with a certain device, people are able to be and do all that they desire. They can successfully negotiate work and personal realms. More specifically, they can perform the tasks necessary to engage with others in multiple realms in a manner that approaches simultaneity.

Such implicit claims lead to several open questions. Do people actually engage in more 'freeing' practices while satisfying their work demands? If so, are they layering what was once 'personal' time with practices of technologically mediated connectivity? And, what does this integration entail? How is it performed and how do individuals negotiate their presence in different spheres at once? Work/life literatures often refer to an increased 'blurring' between different spheres of life (Ashforth, Kreiner, and Fugate 2000; Becker 1998; Clark 2000; Grant and Kiesler 2001). New information and communication technologies clearly enable such

blurring. This literature does little to outline the spectrum of practices and experiences that 'blurring' encompasses. When, where, and who is engaging in distinct blurring practices? For example, a hypothetical spectrum of blurring practices would have 'invisible' monitoring of incoming messages at one end, being 'at the ready' to participate in unexpected or emergency work issues in the middle, and participating in a constant volley of email exchange with work colleagues at the other.

Each of these experiences of participating in 'blurring' practices outlines a scenario where an individual is physically located in a personal, or traditionally non-work, environment while interacting with a different, often work-related, communication realm. Every individual engages their own repertoire of blurring practices. Therefore, developing a rich understanding of how people actually negotiate the capacity for bridging interactions would be a valuable addition to research in socio technical systems and work/life negotiations. Individuals may move across this spectrum depending on temporal or physical location, or they may develop default communication practices that favor a certain blurring experience. Exploring these nuances would shed light on the nature and embodied practices of 'blurring' in organizational environments that increasingly assume that employees are available, in some form or another, when not at the office. Further, focusing on the individual experience of time engaged in 'blurring' practices provides a lens into the ongoing social task of performing 'face work' through different technological media and in multiple, overlapping, social worlds.

If BlackBerry 'addicts' are, in fact, rapidly becoming a mainstay in professional life, who are these people? How is their relationship to wireless email affecting their colleagues, their friends and their families? Like any specific communication device, BlackBerrys are forever threatened by the newer, fancier, sleeker or more robust technology coming off the assembly lines. The BlackBerry model initially rolled out to Linden employees is already passé. BlackBerry may or may not be the brand name associated with the potential for constant, asynchronous, mobile connectivity in five years. Regardless, it is clear that the device carrying the moniker will be different from that used by Linden employees in 2005. This inevitable evolution in the networks and the devices that connect us does not undermine the fact that we are using mobile

technologies to become more and more connected. Individuals are increasingly participating in a communication and media ecology that bridges numerous modes and technologies of interaction (Jenkins 2006). This communication ecology enables and constrains new forms of interaction, new temporal and physical realms of interaction, and new forms of stimuli. It warrants ongoing research on the practice and experience of communication and connectivity in the twenty first century.

In conclusion

The BlackBerry is a device that enables hand held connectivity to a work-provided email account. How people engage with this potential emerges from the interplay between individual framing, and re-framing, ongoing practice and social dynamics. People spend copious amounts of time and energy doing their job. As reward, they receive money, security, sociability, and an identity realm that can create and reaffirm a deep sense of self as a professional or occupational agent. In this realm, BlackBerrys can become more than a tool for accessing email. For some, they can become an avenue for projecting competency, identity, and respect. As such, the BlackBerry can mediate modes of action that become technologies of individual domination. For others, the BlackBerry is used to enhance efficiency without engendering expanded availability. As such, it can mediate a mode of action that acts as a technology of individual autonomy and freedom. Unpacking this distinction within a grounded reality is the goal and object of this dissertation.

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Appendix 1: Interview subjects: Law & Sales

Table A: Law – Gender and firm position

<i>Firm Position</i>					
<i>Gender</i>	Assistant General Counsel	General Counsel	VP, General Counsel	Spouse	
Male = 6	0	3	0	3	
Female = 7	3	0	1	3	
Total = 13	3	3	1	6	
<i>Age range: 38 - 62</i>					

Table B: Sales – Gender and firm position

<i>Firm Position</i>								
<i>Gender</i>	Field service representative	Account executive	Sr. Account executive	Director	Sr. Director	Vice president	Sr. Vice president	Spouse
Male = 36	0	8	18	3	3	3	1	1
Female = 11	6	2	1	1	1	0	0	2
Total = 50	6	10	19	4	4	3	1	3
<i>Age range: 28 - 64</i>								

Table C: Sales – Accounts and product line

<i>Type of accounts</i>					
<i>Product line</i>	Department stores	National chains	'Key' accounts	'Mom and Pop' independents	Regional manager
Fashion forward = 17		3	6	5	3
Industrial = 5			2	3	
Standard = 21	8		4	5	4
Apparel = 4	1	1	1	1	
Total = 47¹⁰⁰	8	4	12	14	7

¹⁰⁰ Two senior managers sat above specific product lines and therefore did not fit in this table.

Appendix 2: Exploratory Interview Protocol¹⁰¹

- **Background**

How long have you worked at Linden? What was your trajectory in the company?

Where did you work prior to Linden?

What is your position now?

What are basic responsibilities of your position?

Describe a typical day.

History – brief overview of education and career

- **First impressions of BlackBerry (introduction & use)**

What was your first thought when you saw the bag with the BlackBerry in your room?

Why do you think Linden chose to give out BlackBerrys now?

What was your impression of the way that they were rolled out?

Has your family had any reaction?

- **Communication patterns of interviewee: pre and post BlackBerry**

Walk me through a typical day, from waking up in the morning to going to bed at night, in terms of how connected you were to work prior to getting the BlackBerry (checking email, when, how, phone calls from colleagues, typical work hours).

Has carrying a BlackBerry affected your typical communication practices?

Time spent communicating with work from home?

Hours on site?

Do you try to keep work and home separate?

How?

Do you feel you are successful?

- **BlackBerrys**

Have you found yourself using the BlackBerry already?

If so, how and when?

¹⁰¹ This representative interview protocol was tailored for interviews conducted shortly after the off-site leadership retreat with BlackBerry recipients who received the device at the retreat.

Do you believe the BlackBerry will have any effect on your stress levels?

What do you imagine will be the best thing about the BlackBerry?

What do you imagine will be the most difficult thing about the BlackBerry?

How comfortable do you feel using the device?

Is there anywhere or anytime that you don't think it is appropriate to use your BlackBerry?

How do you get a sense of what is expected in terms of emailing on the BlackBerry? (Pry for concrete examples)

At work, meetings, etc.

During 'off hours'

▪ **Expectations/Vision**

○ **For organization**

○ **For self**

What do you think might change as a result of the introduction of BlackBerrys?

What would be an ideal scenario?

How do you see your own life being affected?

▪ **Current environment**

○ **Culture**

○ **Media use**

○ **Expectations about communication**

Describe the culture at Linden before the BlackBerry.

What worked?

Any challenges?

How has Linden changed since you first started working here?

Currently, how do people mainly communicate at Linden? (Email, voicemail, face-to-face meetings, virtual meetings).

At work?

Off hours?

What is your impression of how available people are when not at work?

How do you get a sense of what the expectations are?

▪ **Impressions from culture and popular media**

BlackBerrys have been in the media a lot lately, have you noticed any news stories about the device?

What is the BlackBerry all about?

What does that mean for Linden?

Anything I didn't ask?

Appendix 3: Mini-survey questions

Email questions sent in June, 2005 to BlackBerry user population who received the device during the off-site leadership retreat:

1. What, if anything do you think might change in your everyday life as a consequence of your using a BlackBerry?
2. What do you currently expect to be the most useful thing about your using a BlackBerry?
3. What do you currently expect to be the most frustrating thing about your using a BlackBerry?

Email questions sent in August, 2005 to U.S. field-based sales force after the receive notice from IT that they were going to receive BlackBerrys:

1. Have you received your BlackBerry yet?
2. What, if anything do you think might change in your everyday life as a consequence of your using a BlackBerry?
3. What do you currently expect to be the most useful thing about using a BlackBerry?
4. What do you currently expect to be the most frustrating thing about using a BlackBerry?
5. Why do you think Linden decided to give you a BlackBerry?
6. Do you think people have any expectations as to how you will use the device?

Email questions sent in June, 2006 to entire BlackBerry user population across Linden

1. How often do you use your BlackBerry?
2. What, if anything has changed about your everyday life as a consequence of your using a BlackBerry?
3. What have you found to be the most useful thing about using your BlackBerry?
4. What have you found to be the most frustrating thing about using your BlackBerry?
5. Do you think that people have expectations as to how you should use the device?

Email questions sent in November, 2008 to all interview subjects who participated in study

1. Does carrying a BlackBerry give you more or less personal time in aggregate? Why?
2. What have you found to be the most useful thing about carrying a BlackBerry?
3. What have you found to be the most frustrating thing about carrying a BlackBerry?
4. Has BlackBerry communication affected your personal friendships at work? How?
5. What sort of expectations do people have regarding how you use the device? Have expectations changed?
6. Can you think of any episodes where people have explicitly talked about the experience of having a BlackBerry?
7. What is your current job title?

Appendix 5: Snapshot of Phase II structured email review data

EMAIL COUNTS				
Tony, March, 2007				
	THURSDAY	FRIDAY	SATURDAY	SUNDAY
# BB messages AM				
Sent				
Received				
# BB messages wk hrs				
Sent				
Received				
# BB messages PM				
Sent	2			
Received	2	7		
# BB messages all day (wk end)				
Sent			10	1
Received			19	11
'OFF HOURS' only				
# BB messages among colleagues				
Sent	2		3	
Received	2	4	2	2
# BB messages with colleagues CC'd				
Sent			2	
Received		4	4	3
# BB messages with local client				
Sent			1	
Received		2	7	2
# BB messages with international client				
Sent				
Received				
# BB messages mass email				2
# BB messages personal				
Sent			3	1
Received		1	10	5
# BB messages response to off hours query from client			1	
# BB messages response to off hours query from boss			3	
# BB messages response to off hours query from colleague				
# urgent emails				

EMAIL USE: NARRATIVE

Tony, March, 2007

THURSDAY	FRIDAY	SATURDAY	SUNDAY
<p>Did not check on Thursday morning. At work by 8:30am. Left work at 5:15 and went out for beers with guys from work. Didn't check BB while having drinks. Got home around 7:00-7:15. Checked twice before bed.</p>	<p>Did not check Friday morning before work. At work by 8:30am. Left work at 5:00 pm. Home with family. Checked once on Friday night around 8pm but did not read or respond to any messages until Sat morning. Too tired.</p>	<p>Turned BB on in the am because knew had to follow up on issue from Friday. Got on the BB around 8am and responded to a couple of emails from Devin. Kept BB on for most of the day and left on coffee table – looked when walked by. Dealing with ongoing work issue Had multiple kids' sports games from 9:00am – 1:00pm. Purposely did not take BB to games but checked two or three times in the afternoon. Left at 7:15 to go out to dinner with wife. Did not bring BB to dinner (celebration with friends). Didn't get home until 3 am. Did not check that night.</p>	<p>Wiped out from late dinner the night before and didn't turn BB on until 6pm. Expecting a response from Sat. Went to kid's soccer game in the afternoon and didn't take BB (game ended at 4pm). Was on the BB between 6:00pm -7:00pm. Dealing with 5 or 6 work issues and communication with extended family. Did not check again that night.</p>

*Note. Unusual amount of personal emails from family. Dealing with a specific issue.

Appendix 6: Welcome letter and tip sheet from off-site leadership retreat

Welcome,¹⁰²

We're always looking for new ways to make the challenges of your job a little less...challenging. To help manage your work and your teams more easily and efficiently—and to make communicating a little more fun—we're offering you the enclosed BlackBerry® device.

Although it can keep you in the loop 24 hours a day, seven days a week, we'd rather you didn't put it to the test! This tool should give you greater flexibility in your job—not make your job more demanding.

Because we're a diverse group with varied work styles, accepting the BlackBerry® device is optional. You're under no obligation to keep it. And, if you're excited now, but later decide you don't want it, you can return it to the Global Help Desk.

Enjoy your new BlackBerry® device!

¹⁰² In order to maintain confidentiality the text of this letter does not reflect original formatting. Initially, the letter was printed atop stylized artwork of the company logo and printed on thick cardstock. The overall presentation was elegant and substantial.

Appendix 6: Welcome letter and tip sheet cont.

WELCOMING YOUR NEW BLACKBERRY® DEVICE, AND TEACHING IT SOME MANNERS.

Your new BlackBerry® device can increase your freedom, speed up your productivity and become one of your most important communication tools. It can also be a distraction, a nuisance and downright dangerous. Below is a short list of suggestions and manners to get the most from your BlackBerry® device.

DO

- Use it to maximize time and productivity
- Use it to create greater flexibility in your job
- Focus on the person you are talking to
- Place on silent mode during business meetings and social events
- Clarify specific expectations with your leader on usage and availability
- Reach agreements with your partner for usage during off hours
- Determine if you're sending email to a wireless device. Telltale signs like abbreviated words, emoticons or the message "Sent from my BlackBerry Handheld" mean you're sending a message to a device that doesn't have a large display or bandwidth
- Protect your data by creating a password or by locking your device
- Report lost or missing BlackBerries immediately to the Global Help Desk

DON'T

- Read or email while driving (safety at all times)
- Focus more on the gadget than on respecting others
- Over abbreviate your words or sentences
- Email in meetings
- Email while talking to friends or family
- Keep it by your bedside
- Feel like you have to respond to emails 24/7
- Erode your personal/family time
- Use it anyplace it will bother other people
- Send any messages that you wouldn't email from your computer (personal or private). Remember this is a live device

Appendix 7: Evolving BlackBerry experience for one Linden attorney

Early BlackBerry, 7/05: Hesitant optimism	After 2 yrs, 4/07: Increasing expectations	After 3 yrs, opinion of spouse, 3/08: Personal consequences
<p>And so this [BB] is filling a nice niche, I think, and let's say from the time I get home to maybe an hour or two and where, if somebody has something important they want to send, even if I wasn't working on something critical that night, or a big agreement, but it's like wild something, of some critical force, just happened in the last hour or two I can be available.</p>	<p>I think ... other people's expectations are different. No one in the company has ever said, "Why didn't you respond to that email that I sent you over the weekend." Nothing that direct. But there may have been more subtle things.</p>	<p>You know, this is a part of the culture that you're in, and you want to stay in this culture, you can manage things that are within your control, but answering emails and being available are fairly out of your control. It's the expectation.</p>
<p>And probably it's just a slight reduction in stress just because, "Oh, it's getting so easy now", as opposed to, if the culture starts to change and there's like this super expectation, and that would probably cause the stress to increase. I was on vacation last weekend and if the expectation was that I was going to be checking this thing, that would be stressful and kind of depressing, you know? Because I need to get away. I mentally need to get away.</p>	<p>It's like, it's an easy way, I think, to add more tasks to someone's already very busy schedule. I mean, that's part of what I was talking about too. Which is to say, you're sitting at your work desk and you're getting emails and letters and telephone calls and things like that, and, it's like I'm thinking of something now, therefore I'm conveying it to you now, and I've now created expectations, 'cause I sent the message.</p>	<p>[T]he expectation is that you're given this sort of expensive tool – I think they're becoming more affordable – so that you can be reached wherever you are, because that's the expectation. So not to use it and not to be available is just not okay.</p>
<p>I would say thus far it's probably, it has a slightly stress reducing impact. Because of the fact that I'm not plugging into the laptop every single night... It's a quick and easy tool that allows me to plug in, without a lot of stress. I don't have to take too much time from the family. I don't have to log into this damned thing, make a production out of it, and then say, oh, I think I'll surf the net now.</p>	<p>At some level I'm going to be looking for a response or feedback or whatever. It's that sort of ESP sort of expectation. The transmission is there. It's very easy if someone now has a wireless tool and no matter where they're at – they're in the bathroom, in the ballgame, at a park, okay, great, you can assume it's out there and they got the message.</p>	<p>It's not like he went out and bought one on his own so that he could, you know, be away for the weekend and do it himself. It was, you know, given by the company, so the expectation is that you be available 24/7.</p>
<p>I'll be pretty blunt with you, I'm not going to send an email just to show that I'm on email. See, I'm plugged in and engaged, you know. I feel like when I'm here doing my work, and doing what needs to be done, I'm proving and showing myself. But if it was something of a nature that I felt like, you know what, if I respond to it, it might put someone at ease, because they're worried about this, or, you know, wow, I really should respond to this now, as opposed to, yeah, that was really intended for Monday and it can wait until then.</p>	<p>So, I guess in that sense, that your overall job pressure goes up. It might feel that, – okay, am I being forced into more efficient with my time? That thing is, "I'm being forced into being more efficient with my time" is a translation for, "You're cutting into my personal time. You're cutting into my time." So a business might say, this is at tool that is gonna give you more efficiency – I can take the flip side, it's like, no, it's a way for me to lose my personal time. And you'll know when you have a family; you have to try to carve out in the world some space for yourself.</p>	<p>So these tools, you know, like cell phones and BlackBerrys are supposed to make your work life more efficient. What I find and what I've thought for a long time is they just make your work life continuous. You are never given the excuse of, "You couldn't reach me," and I have sat there with him on a Friday night sipping the glass of wine myself while he's replying to live emails from [colleagues].</p>

Appendix 8: BlackBerry introduction email – sales force roll out

Hello,

In an effort to improve your ability to manage work and communications while traveling, we're happy to announce that you will be receiving a new BlackBerry handheld soon. The device is now being configured for you and will ship out to your home address in the coming weeks. If you do not want the BlackBerry for any reason, please contact your manager immediately to discuss your decision. You need his/her approval to not receive the BlackBerry. You must reply to this e-mail within 5 business days to decline acceptance of the BlackBerry. If you will be in the [headquarters] office between XXX and XXX and would like to pick up your BlackBerry rather than have it shipped, please also notify us within 5 business days of today's date.

What do I get with this BlackBerry?

- 1.) Linden literature explaining the use of your BlackBerry in the Linden environment.
- 2.) A 7290 BlackBerry with a international travel kit.
- 3.) A US car charger.
- 4.) A top 20 tip sheet for your BlackBerry.
- 5.) BlackBerry Frequently Asked Questions (FAQ) sheet.
- 6.) Information about web training offered through T-Mobile.

What will not come with the BlackBerry?

- 1.) The BlackBerry will not come with cell phone service when you initially receive it. The BlackBerry will be configured for data communication only (e-mail). Once you have determined that you have good coverage in your area and are comfortable with the device, we can activate the cell phone service upon your request by contacting the Help Desk.

What is the Cost?

- 1.) There will be a one-time charge of \$600 for deployment of your BlackBerry that will be charged to your cost center.
- 2.) There will be a recurring charge of \$39.99/month for BlackBerry usage that will be charged to your cost center while there is no cell phone service.

Once you choose to activate the cell phone service, your cost center will be charged approximately the same as what you are paying for your current cell phone. Your BlackBerry can be used both domestically and internationally. With cell phone service activated in your BlackBerry, you will eliminate the need for a separate cell phone and therefore, the monthly charge for that separate device. We can even arrange to have your old cell phone number converted to your BlackBerry, helping you maintain a virtually seamless connection between you and your vendors/customers/contacts who have your current phone number.

We hope you will enjoy your new BlackBerry.

Should you have any questions, please contact the Linden Help Desk at XXX or by phone at XXX.

Appendix 9: Evolving BlackBerry experience for one Linden sales representative

<p>Pre-BlackBerry, 8/05: Negative orientation</p>	<p>Post-BlackBerry (email survey), 10/05: Overt pessimism</p>	<p>After 1 yr (email survey), 8/06: Surprised optimism</p>	<p>After 3 yrs, 11/08: Continued appreciation</p>
<p>Honestly have no interest in one of those. I feel like I'm over communicating already. I'm sure it would add value, but to be honest I feel like I'm around work 24/7 as it is and that's really the job because you're office is in your home. I just can't imagine anything, and I've asked this of those that I work with that have the BlackBerrys, anything that is that critical in our work world that you have to have constant communication. But I know that it's in an era where people would again respond to you non-personally through e-mail on critical issues which I don't get.</p>	<p><i>Have you received your BlackBerry yet?</i></p> <p>Yes</p>	<p><i>How often do you use your BlackBerry?</i></p> <p>I use it most days throughout the work week.</p>	<p>In the store, I'm prepared to make an answer on something right away. I've learned to look at this thing [BlackBerry] and say "ok, this is my friend." And at the end of the day, I may know I have to go in the office for a few minutes and look at this spreadsheet or type in a few things, but that's it. And I'm better organized, prepared for the end of the day, prepared for the next day.</p>
<p>I think the stress level would go up higher for me because it's something that I know is there telling me that I've got more work coming in. It's something that it's not useful if you don't have it on you and I wouldn't have it on me. I'd leave it in my car. I'd leave it in my briefcase and I wouldn't look at it until I'm ready. I wouldn't change that no matter what because I know that if I'm not able to dedicate 100% of my focus on where I'm actually at then I'm not going to yield results. That's me. A lot of people more talented than me can do multiple things which I only accomplish three a day. I can only do one thing at a time.</p>	<p><i>What, if anything do you think might change in your everyday life as a consequence of your using a BlackBerry?</i></p> <p>More stress for sure. More time working or working on how to use it to do work.</p>	<p><i>What, if anything has changed about your everyday life as a consequence of your using a BlackBerry?</i></p> <p>On days that I travel and away from desk for the entire day it is useful checking on emails so that I do not spend hours catching up when I get home. This has been a unexpected benefit.</p>	<p>I've learned it's not this albatross, with people coming down on me for not using it all the time. Generally, it is very positive.</p>
	<p><i>What do you currently expect to be the most useful thing about using a BlackBerry?</i></p> <p>I don't think it will aid me in getting my job done any better.</p>	<p><i>What have you found to be the most useful thing about using your BlackBerry?</i></p> <p>Again, catching up on emails sent during the day when I am out with customers.</p>	<p>I felt like it was going to bad. But honestly, it has not been that bad. . . I was afraid; Like they had delusions of grandeur about what the BlackBerry would do for the business. Our business is about the selling of shoes. Like the BlackBerry was going to sell millions of more shoes, millions</p>

			of pairs. My fear was the expectation that the company bought this tool, spend millions of dollars, for you to sell shoes. Bottom line. But that doesn't seem to be the case. It just hasn't happened.
	<p><i>Why do you think Linden decided to give you a BlackBerry?</i></p> <p>It's all about keeping tabs on what you are doing with the spare time that you already don't have.</p>	<p><i>What have you found to be the most frustrating thing about using your BlackBerry?</i></p> <p>None found.</p>	<p>I definitely have more time at home. The times when I get into the driveway and I think, I don't need to pop computer open. I'm just done. I can go throw the football, do some chores, enjoy the rest of the evening. Instead of carrying around that sinking feeling, that you didn't get back to someone.</p>