

**Do Mobile Technologies Enable Work-Life Balance?
Dual Perspectives on BlackBerry Usage for Supplemental Work**

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Introduction

This chapter explores the usage of mobile communication devices to support supplemental work. The ‘anytime, anywhere’ functionality of the devices provides enormous convenience for users, and is thought to enhance their work productivity, while facilitating work-life balance. But their always-on nature can lead to conflict when family members or others outside the users’ work environment feel that work is spilling over into the users’ non-work life.

Using texts from newspapers and magazines, the chapter investigates usage of a popular mobile device, the BlackBerry[®], from the perspectives of users’ families and friends, and of the users themselves. The contradictory interpretations are striking. Indeed, the very acts that define balance for BlackBerry users are clear signals of imbalance to those around them, resulting in strong opposition to the devices among non-users. Described as BlackBerry orphans (Rosman, 2006) and widows (Sokol, 2006; von Hahn, 2004), non-users express ‘chagrin,’ ‘aggravation’ ‘disapproval,’ and ‘ire’ about the use of the device in their homes (and elsewhere).

The chapter shows how the behaviours that users adopt to increase their work-life balance result in the materialization of work, and taunt those in the non-work environment with ‘absent presence.’ As the usage of ‘mobile work extending technologies’ like BlackBerries is expected to rise in the future, the chapter outlines questions that should be addressed to help reduce the potential for work-life conflict.

Work, Mobile Technologies and Work-Life Balance

There is a vast literature on telecommuting and telework, which provides the foundation for

more recent studies on mobile work. 'Telecommuting' refers to a specific arrangement to work at home, reducing or eliminating the need to travel (commute) to work (Nilles, 1976). 'Telework' is used to describe "remote work [that] involves the use of information and communication technologies" (Sullivan, 2003, p. 159). Many researchers consider the terms telework and telecommuting synonymously (Ellison, 1999). What is important in this context is that an explicit arrangement (voluntary or involuntary) is made between an employee and an employer that relocates some or all of his or her tasks to the home, from an office location (Felstead, Jewson, Phizacklea, & Walters, 2002; Fleetwood, 2007). These arrangements represent a substitution in the work environment, where employees give up some time in their offices and replace it with time spent working at home (Kraut, 1989). But the mobile work behaviours described here are not generally part of a formal, intentional relocation of work from one environment to another. Employees are not giving up their office space, instead they are extending their work environments to include spaces beyond the office. This is an important distinction (Kosseck, Lautsch, & Eaton, 2006), yet the supplemental nature of such work practices is not always reflected in studies on location of work (e.g. Felstead, Jewson, & Walters, 2005; Hill, Ferris, & Martinson, 2003).

Bailyn (1988) describes this extension of work into home as 'overflow,' and notes that people have been bringing work home from the office for many, many years. New technologies allow knowledge workers to access, edit and create files, communicate with colleagues or clients, search for information and conduct other tasks from many locations outside their offices. Brown and O'Hara (2003, p. 1575) observe that mobile work 'makes place,' rather than 'taking place,' suggesting that any location can be made into a work place by virtue of the fact that someone chooses to work there. The portability of work, and of technologies, allows employees

to carry out 'supplemental work at home' (Venkatesh & Vitalari, 1992) but also extends the potential workplace to anywhere within the reach of mobile technology. In the past decade, supplemental work *at home* has given way to supplemental work *anywhere*.

The practise of working anywhere could easily be described as mobile work. Hislop and Axtell (2007) point out that mobility is not considered in the existing telework literature, but argue that mobile telework is becoming "an increasingly important form of work" (p. 35). Mobile teleworkers move between home, office and "locations beyond home and office" (p. 46), which include client premises and places visited for business travel. However, Hislop and Axtell do not appear to identify these spaces as locations for supplemental work. Other studies of mobile work (e. g. Brodt & Verburg, 2007; Brown & O'Hara, 2003) also exclude explicit discussion of mobile work conducted outside usual working hours.

Thus, while there are existing literatures on supplemental work at home, and on mobile work, it appears that there has been limited academic attention paid to date to the phenomenon of mobile technologies being adopted in ways that allow supplemental work to move beyond the boundaries of home. One exception is Duxbury, Thomas, Towers and Higgins's (2005) research on 'work extension.' Their definition of work extension recognizes that much work is now done outside office hours (anytime) and at multiple locations outside the office (anywhere). Thus, extended work is supplemental work, but the definition no longer limits the location of supplemental work to the home. Personal digital assistants (PDAs), laptop computers, mobile email devices (e.g. BlackBerries) and home PCs are all considered work extending technologies, and the technologies are becoming more prevalent among managerial and professional workers (Towers, Duxbury, Higgins, & Thomas, 2006).

As more people adopt extended work patterns, work is imposed on spaces and at times that

were previously ‘work free,’ thus increasing the potential for role conflict. Conflict between work and non-work environments is not new (Greenhaus & Beutell, 1985; Lewis, Gambles, & Rapoport, 2007) and it is addressed by an extensive literature (see Edwards & Rothbard, 2000, for a review of key concepts). However, much previous work on ‘work-life’ or ‘work-family’ balance in a telework environment (e.g. Golden, Veiga, & Simsek, 2006; Hill et al., 2003; Madsen, 2003; Shumate & Fulk, 2004) does not reflect the pervasiveness or ubiquity of mobile technologies, nor does it fully reflect the supplemental nature of work that is extending beyond office hours and office boundaries. When supplemental and mobile work convergence to create an anytime, anywhere, always-on work environment, the potential for conflict and imbalance is exacerbated (Menzies, 2005).

Balance means different things to different people, and the distinction between ‘work’ and ‘life’ is problematic. The description of ‘family’ as being the core of life outside work is too narrow (Ransome, 2007), while focusing on family alone as the key component to life outside work excludes leisure and other non-family, non-work responsibilities (e.g. contribution to local communities) (Guest, 2002). For expediency however, in this chapter participants in the non-work sphere of individuals’ lives are referred to as ‘friends’ and ‘family,’ and the non-work sphere is simply referred to as ‘life.’

Boundaries delineate spaces in people’s lives (e.g. work, home, ‘third places’) (Nippert-Eng, 1996), and individuals assume various roles (e.g. parent, partner, employee) within these bounded spaces (Ashforth, Kreiner, & Fugate, 2000). Few people are able to completely segment the spaces in their lives, thus there is potential for ‘role conflict’ as the demands of one role compete with the demands of another (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964). Conflict between work and family is a particular concern (Duxbury, Higgins, & Coghill, 2003; Duxbury,

Higgins, & Lee, 1994; Jacobs & Green, 1998).

Clark's (2000) 'work/family border theory' builds on the assumption that work and family occupy separate, yet related spheres. Each sphere has its own rules and culture, and there is a border between the two. The theory illustrates the integrated, interdependent nature of work and family life, and moves beyond simple observations of role conflict to frame the search for work-life balance as a dynamic, ongoing set of negotiations that occur whenever individuals cross the border between their work and life domains. Clark outlines various propositions that explain how borders can facilitate or inhibit work-life balance. Assessment of work-life balance is influenced by a person's role in a domain, and by the strength of the border between domains. She suggests that individuals who are central participants in a domain (i.e. strongly identify with the domain and influence its environment) have more control over the border than peripheral participants. As such, the expectations of the life domain may be set by a worker's family, and not be in line with the expectations of the work domain-centric border-crosser (and vice versa). However, it is also proposed that 'other domain awareness' influences work-family balance, so that when domain members are aware of the demands of the other domain, they are more supportive of the border-crosser.

Clark's theory does not consider the impact of work extending technologies on work-life balance, but it is instructive to think of these technologies crossing borders with their users. Work extending technologies are thought to enable improved productivity (Smith, 2005) and help workers to achieve greater balance between work and non-work environments (Cousins & Robey, 2005; Schlosser, 2002), but others suggest that this technology-enabled extension of work is invasive and counterproductive (Hallowell, 2005; Jackson, 2007). What is of interest in this chapter is the adoption of work extending technologies, like the BlackBerry, that are

portable, mobile and work almost everywhere, regardless of users' work-life borders.

As early as 2000, the term 'Crackberry' was being used on Wall Street to describe the addictive nature of these devices (Haines, 2000). While the question of whether BlackBerry users are clinically addicted to their devices remains open (see Porter & Kakabadse, 2006, for a discussion of technology addiction in the workplace), there is no doubt that BlackBerries are deeply embedded in the daily lives of many of their users, and can trigger conflicts about work boundaries (Middleton, 2007; Middleton & Cukier, 2006). This chapter explores the relationship between BlackBerry adoption and perceptions of work-life balance. Unlike Middleton and Cukier's previous work, this study encompasses the dual perspectives of BlackBerry users and their families and friends, recognizing the importance of assessing balance and work-life conflict from both sides (Hill, Hawkins, & Miller, 1996). It builds on earlier work by Schlosser (2002), Mazmanian, Orlikowski and Yates (2005), Towers et al. (2006), and Golden and Gessler (2007) to further explore work-life balance challenges faced by knowledge workers when using mobile devices that offer users ubiquitous connectivity to the office and support supplemental work at anytime, from any location.

In North America, the BlackBerry has become the device of choice for mobile email. First attracting public notice for providing communication in New York City on September 11, 2001 after much of the telecommunications infrastructure failed (see for example "Downtown BlackBerry E-Mail Repository"), the BlackBerry experienced slow but steady growth in subscriptions for its first few years. By early 2004, there were more than 1 million BlackBerry subscribers, and by mid-2005, 3 million people had subscribed (Research in Motion, 2004; Research in Motion, 2005) to this "iconic pocket-sized e-mail device" (Economist Staff, 2005). A patent dispute in 2006 that threatened to shut down BlackBerry service caused much

consternation among users as they faced the potential loss of their devices (Parks, 2006; Smith, 2006). Although rare, disruptions in service are headline news (e.g. Vascellaro, Yuan, Sharma, & Rhoads, 2007). As of late 2007, there were more than 10.5 million subscribers (Research in Motion, 2007), with growth estimated at 1 million subscribers every three months (Sorensen, 2007).

The BlackBerry's reputation, and continued success, rests upon its highly reliable, secure and user-friendly email service – “It's small and it works” (Estates Gazette Staff, 2005). The device is a PDA and a mobile phone, and provides ‘push’ email functionality, delivering messages as they are received without the need for users to take action to connect to the internet. In many countries, before even stepping off an airplane, travelers can send and receive email effortlessly by just turning on their BlackBerries. This simple device has become indispensable for legions of business users around the world. It allows people to check their email anywhere, and to respond to messages in an unobtrusive manner. It also makes it very easy for individuals to carry their work with them, and to engage in work activities in locations and at times that were previously ‘off limits.’

The following section presents data showing how BlackBerries are used to support supplemental work, explaining how the devices help users balance their work-life responsibilities. It also shows how this assessment of work-life balance is not shared by BlackBerry users' friends and family, who perceive the devices to be disruptive, distracting and over-used.

BlackBerry Usage Data

The data that follow are drawn from popular press accounts of BlackBerry usage in the past two years (2005-2007), as catalogued in the *Factiva* database. After a search on the term

'BlackBerry' yielded almost 60,000 'hits,' the more restrictive term 'Crackberry' was used. While this approach excluded relevant articles about BlackBerry usage that did not mention the word Crackberry, it does provide a good sample of articles that address the tensions created as mobile technologies enable work to spill over into other aspects of people's lives.

From a starting point of more than 1000 articles, a research team removed duplicates and irrelevant articles, resulting in a final compilation of just over 200 articles that discussed various aspects of BlackBerry (and other mobile device) usage in individuals' daily lives. The team then indexed the articles¹ in a bibliographic software program and exported the texts into a qualitative data analysis program for thematic analysis using a semi-structured coding protocol.

It might be argued that BlackBerry usage behaviours deemed newsworthy are extreme ones, and not representative of 'ordinary' BlackBerry users going about their daily lives. But the vivid examples presented here do show the conflicts inherent in adopting mobile technologies to extend supplemental work practices, and provide a focal point for discussing the implications of continued uptake of work extending technologies. While the results may not be generalizable, the anecdotes provided here are consistent with descriptions of BlackBerry usage in a small scale study of Canadian BlackBerry users conducted in 2005 (Middleton & Cukier, 2006; Middleton, Scheepers, & Cukier, 2005), and provide insights into users' and non-users' experiences of 'mobile work extending technologies.'

In the section below, data are presented to show how BlackBerries are used for supplemental work away from the office. Descriptions of how the devices enable work-life balance for the users are provided, followed by evidence from non-users that offer a contrary perspective on the device's role in balancing the work and non-work spheres.

Location of Use

BlackBerry users are described as “the ones hunched over like squirrels with a walnut, thumbs flying manically, even at weddings, funerals and the movies.” A “devoted” user reported using his BlackBerry during his wife’s stepfather’s funeral, a Congressman was observed spending “a great deal of time on his BlackBerry during [Ash Wednesday] service and prayer, both reading emails and sending emails.”

Some users take their BlackBerries into the shower (“keep[ing] it within view but dry”), and there are reports of people who “accidentally dropped the device in the toilet.” One user described how he’d “fallen asleep with it in [his] hands, read it as [he] ate, watched TV, waited in line, and while playing soccer with [his] son.” Others spend time at their children’s concerts, baseball games, or swim practices with BlackBerries in hand, pleased that they can “still be at work!”

BlackBerries are frequently found at the meal table. It seems that no special occasion is exempt, as users confess to “us(ing) it at Passover dinner,” and “interrupting the turkey dinner, mince pies and festivities on Christmas day to check their BlackBerry for email messages and keep tabs on the company’s IT operations.” One woman “caught her husband e-mailing under the table during her Valentine’s Day dinner,” while another found her companion checking email throughout their first date. These practices are captured nicely by cartoonist Philip Street in his *Fisher strip*².



©Philip Street. Used with permission.

In describing the factors that led up to his divorce, a man says “the thing that really brought it home to me was we were in an intimate moment in bed, and I lifted up my head and I caught my wife checking her e-mail on the BlackBerry.” Not an isolated incident, a doctor reported being asked by a patient “whether [he] thought it was abnormal that her husband brings the BlackBerry to bed and lays it next to them while they make love.”

A woman describes a dream “about squirrels eating acorns. ...And then I woke up, and it was my husband, the tap, tap, tap, tap on the BlackBerry.” A man reports that BlackBerry is “the last thing I check before going to sleep and the first thing I touch in the morning.” Some people even use it in the middle of the night, including one man who regularly checked email while getting up in the night with his newborn daughter.

There are many reports of drivers using BlackBerries (“It is actually scary to see people driving in their cars receiving and sending e-mails”), and the devices also accompany their users on vacation. BlackBerries can be found on the golf course, poolside or at the beach. A man took his BlackBerry to Maui for his 10th anniversary celebration, and another “went to Disneyland last year accompanied by his wife, their two children and his BlackBerry. According to his wife, the BlackBerry drained much of the magic from the Magic Kingdom.”

User Perceptions of Work-Life Balance

BlackBerries provide their users with a ‘24/7’ connection to their offices, and there is a strong sentiment that the devices help provide balance in users’ lives. “I like to be connected,” says a small business owner. “I don’t know what I would do without it. And I’m much more likely to take vacation because of it. I have more work/life balance because I carry my Treo [a Palm Pilot product with similar functionality to the BlackBerry]; I feel less need to be in the office.” A lawyer describes how his BlackBerry allows him to “go places and do things and still stay on top of my work... keep[ing] tabs on the office, while hanging out with his kids.”

BlackBerries allow their users to be efficient, while spending time with friends and family – “If we’re standing in line for 40 minutes waiting for a ride [at Disneyland], I don’t see why I can’t answer my e-mail,” says one user. When his son made the Little League all-star team, a man enthused that “the BlackBerry allowed me to go to the game and still deal with some real-time issues we had in the office.” A 2006 survey by recruitment firm Korn/Ferry found that “More than one-third of 2,300 executives surveyed in 75 countries believed they spent too much time connected to communications devices. But more than three-quarters, or 77 percent of respondents, said they believe mobile communication devices primarily enhance their work/life balance rather than impede it.”

An Alternative Perspective on Work-Life Balance

Many people, especially friends and family of BlackBerry users, do not share the belief that BlackBerries create balance. This quote expresses a common sentiment – “She hates that he’s a BlackBerry fiend, especially when he argues that using it leaves more time for family.” The important people in users’ lives are not shy in expressing their opinions about BlackBerry use in their environments. While a four-year old expressed her displeasure at her mother’s BlackBerry

usage by simply hiding the device, her seven year old brother was more sophisticated in trying to flush it down a toilet. Immersing BlackBerries in water seems to have broad appeal. “The winner of the British version of *The Apprentice*, a reality TV show, has admitted that his wife has threatened to flush his BlackBerry down the toilet,” a threat repeated by other users’ spouses. One wife “wanted to pick it up and throw it into the swimming pool” (while on vacation) while another “tried to throw it off the boat when [they] were on [their] honeymoon.” The *Alex* comic strip³ regularly captures the frustrations of BlackBerry users’ families, as seen below.



Alex cartoon by Peattie and Taylor, Alex appears in the Daily Telegraph.

Throwing the BlackBerry out a window was also suggested by an irate wife who felt ignored by her husband. A husband remarked that he would not use his BlackBerry at Christmas, for fear of watching his “BlackBerry crackling away on the fire along with the Yule log.”

In some households, family members have adopted ‘rules of engagement’ for BlackBerry use. This may mean a ban on using the BlackBerry on weekends, or a ban on use in restaurants and the bedroom. Children help to discourage their parents’ BlackBerry usage, “begging” them to stop using it at the table. One woman was surprised when her daughter “literally applauded her decision to leave her BlackBerry behind when vacationing.” Nevertheless, some people continue to use their BlackBerries, even when it is very clear that such usage is not acceptable to others. Fearing discovery, users hide their devices from spouses or family members but insist their behaviours are justified. One user explains that “his BlackBerry actually alleviates marital

tension by allowing him to secretly check his email and get work done during vacations with his wife.” Another individual reports that checking his BlackBerry on vacation (while hiding in the bathroom to do so) resulted in “A relaxed me, an unsuspecting girlfriend, a holiday success.”

Analysis

The data presented here show the pervasive usage of BlackBerries, and demonstrate the conflicting assessment of the value of such devices. BlackBerries do enable people to be connected to their work from anywhere, at anytime. This connectivity provides users with great comfort because it allows them to remain in contact with their jobs while attending to other aspects of their lives. While there is no doubt that many users feel pressured to remain connected to work at all hours, with some organizational cultures reinforcing and validating this expectation (Middleton, 2007), users are adamant that their BlackBerries allow them freedom, and contribute to work-life balance by allowing them to spend more time with friends and family. But their friends and family often resent the presence of the BlackBerry, seeing it as a means for users to extend their work into spaces where work is not welcome. Rather than interpreting this as work-life balance, friends and family view anytime, anywhere BlackBerry usage as always-on work. Rather than experiencing less conflict as a result of being able to better manage their work and life commitments, BlackBerry users may face increased conflict, as their friends and family actively resist the device. BlackBerries have been successful because they can turn any place into a work place, which is exactly the reason why they are reviled by those who want to contain work within well-defined agreed upon boundaries.

Clark’s (2000) work/family border theory (described earlier) offers some insights to help understand the data presented above. Of interest in this chapter is the border crossing from the work domain into the family (non-work) domain, where work-family spillover is possible. The

data show that when BlackBerry users cross from the work to the life (non-work) sphere they frequently bring their BlackBerries 'over the border.' They are met by the border-keeper, usually a spouse or significant other, as well as other domain members (e.g. children). It is expected that upon crossing the border (which may be physical, temporal or psychological), "domain-relevant behavior" (Clark, 2000, p. 756) takes place.

Applying the concept of border crossing to the data presented above generates insights related to two themes. The first theme is described as the materialization of work, in which a specific artifact, the BlackBerry, permeates the work-life border to bring work into what is understood to be a non-work environment. The second theme relates to the idea of 'absent presence' (Gergen, 2002), and can be seen here as a form of taunting. Given its visibility and popularity, the BlackBerry has garnered more attention than other devices, and it is likely a harbinger for more widespread uptake of mobile work extending technologies. It is suggested that the observations made here are not device dependent, but apply wherever mobile technologies are adopted to facilitate anytime, anywhere supplementary work.

Materialization of Work

Border theory suggests that there are acceptable behaviours for each sphere, and that when a person crosses the border, he or she transitions to the norms of the sphere just entered. Ashforth, Kreiner and Fugate (2000) note that these crossings involve exiting one role and taking up another. The adoption of mobile technologies reduces the likelihood that such role exit will actually occur when moving across the work-life border, as the demands of the work role can continue to be met by using mobile technologies in the life sphere. As such, a BlackBerry can be understood as a very visible manifestation of work and of permeable work-life borders. When the device is taken across the work-life border, it provides a clear indication that the user remains

linked to the work domain even though he or she is physically present in the non-work domain. Even if the user leaves the device turned off, its mere presence signals that work is possible. Users argue that this provides them with the flexibility to attend to their non-work lives without neglecting work duties, but from the perspective of the domain members this materialization of work shows that users have not left the work domain.

Prior to the widespread adoption of mobile devices, it was easier to contain work within physical and temporal boundaries. While spillover of work into the non-work domain has always been a potential source of conflict, what has changed with the uptake of mobile work extending technologies is that temporal and physical boundaries are more easily breached. It is easy to take a BlackBerry to a social event (dinner party, baseball game) or to check email while lying in bed or while sitting by the pool on vacation. Users view such behaviours as freeing themselves from the physical constraints of the office, but for their friends and family, work is now visibly occupying times and spaces in the non-work domain that were previously off-limits. The device that enables this extension of work acts as a ‘lightning rod,’ attracting attention to the presence of work. Despite users’ best efforts to be discrete when using BlackBerries in ‘inappropriate’ settings, its presence draws attention to work. Because it is so pervasive, and provides a persistent visual reminder that work has infiltrated the non-work domain, the BlackBerry has become an obvious target for criticism and a flashpoint for work-family conflict. The device may well act as a proxy for broader dissent about differential expectations regarding work-life balance, increasing the intensity of resistance to the device and explaining why its very appearance can provoke such ire and emotion from users’ friends and families.

Absent Presence: How Mobile Devices Taunt Non-Users

Not only does the BlackBerry bring a visible manifestation of work into the home and other

non-work environments, it can also psychologically remove users from the non-work environment and return them to a work mindset. As has been mentioned, BlackBerry users feel that the device allows them to balance work and life domains, because they can attend to work needs while outside the workplace. But although physically present in the non-work domain, whenever users engage with their BlackBerries, they are removing themselves from their present environment and focusing their attention elsewhere. Described by Gergen (2002) as 'absent presence' and by Fortunati (2002) as 'present absence' this behaviour taunts those around the user by providing the appearance of attention to, or participation in the non-work domain, while actually remaining grounded in the work domain.

Users pride themselves on the fact that their BlackBerries allow them to attend events and participate in activities that they would have missed in the days before mobile technologies, yet arguably, they are still missing such events by engaging with their devices, rather than with their physical environment. In the past, people with heavy work commitments would have met these commitments by staying at the office to complete the work, or by confining their work to a specific location within their non-work domain (e.g. a home office), and not participating in the non-work domain. BlackBerries allow the work to be done anywhere, satisfying users that they are achieving balance, but frustrating their friends and family by making it more obvious that work is spilling over into non-work times and spaces. Given the particular reactions that BlackBerry use in the non-work domain provokes, it is understandable that non-users might interpret this behaviour as taunting. In the name of participating in activities with families and friends, BlackBerry users join the non-work environment, and promote the appearance of being engaged with it, but can at any time 'step out' of the environment to return to work. From the perspective of BlackBerry users, the guilt of missing an activity is removed or at least mitigated,

but from the perspective of family and friends, it appears that the BlackBerry exacerbates the awareness of work-life imbalance.

Discussion and Conclusions

The anecdotes of BlackBerry usage presented here show how actions that knowledge workers take to balance their work activities with their personal lives can result in conflict. By materializing work, mobile work extending technologies like BlackBerries can become the centre of attention when used outside the office, and provide a focal point for discontent among friends and family members. Likewise, efforts at being present in the non-work environment are not always met with approval. Although the workers make a special effort to engage with their friends and family by participating in events and activities, the fact that they bring their BlackBerries with them triggers resentment. Rather than appreciating the worker's presence in the non-work environment, attention is focused on the absences created when the worker engages with his or her job through a mobile device.

It is likely that the workers do not fully understand their friends and family members' disdain for their devices (and equally likely that friends and family do not understand the demanding nature of the work environment that does expect workers to be connected and available outside business hours). Towers et al. (2006) found that heavy users of work extending technologies believed that their families understood their need to work during family time, and although they recognized that heavy usage could be problematic, individuals felt that they were doing a good job of controlling the extent to which their technology use was spilling over into their personal lives. This justification of individual work practices indicates that workers believe their approach of combining work and non-work activities is both effective and appropriate.

This approach to work-life balance is comparable to the 'integrating the self' repertoire

identified by Golden and Gessler (2007), in which PDA users explicitly used their devices to transcend, rather than contain, work-life boundaries. Felstead and Jewson (2000) identify segregated and integrated approaches to creating work-life boundaries. The integrated approach, which was adopted by the BlackBerry users described here, is based on weak temporal and spatial separation of work and non-work domains. In their study comparing different types of mobile work, Hislop and Axtell (2007) showed that an integrated approach provided less work-life balance than a segregated approach.

This study provides no point of comparison to determine whether a more segregated approach to BlackBerry adoption would have resulted in less work-life conflict, but it does show that the integrated approach that was adopted did not sit well with friends and family. This is an interesting finding, because one of the key affordances of mobile work extending technologies like BlackBerries is that they allow users to integrate their home and work lives, and to maintain open boundaries between the two. This study suggests that while this works for the BlackBerry users, it may not work for those around them. It is possible that the covert uses are a response to the shortcomings of an integrated approach, allowing individuals to avoid disapproval and conflict by reverting to absence and secrecy to conduct their work in non-work domains.

BlackBerries and other mobile work extending technologies are still relatively new, and it is likely that the ways in which they are used will evolve over time. There is some evidence of users adopting more structured approaches to keep their work and personal lives in balance (Jackson, 2007), but the usage patterns portrayed here are the dominant ones at present. As noted earlier, for many users the appeal of the BlackBerry or other mobile devices is that they do enable anytime, anywhere work, functionality which has been constructed by users as a means of controlling their busy, demanding lives and enhancing work-life balance. As such, it is expected

that the usage patterns documented here and the conflict such usage engenders will continue. This raises a number of questions to be considered by those adopting mobile technologies to support supplemental work, and by researchers interested in the intersection of mobility and supplemental work.

- What are the longer-term implications of work-life conflict that is exacerbated by the adoption of mobile devices? Are there ways of mitigating the conflict? What actions could be taken to achieve better fit between the users' real needs to remain connected to work while away from the office, and the demands of their non-work environments? Can users learn to temper their addict-like attention to their devices, while those around them accept that some usage is necessary? Are there alternatives to covert use that meet the needs of users and their friends and families?
- What are the broader forces driving users' compulsive attachment to mobile work extending technologies? Are the devices truly addictive, or do users exhibit signs of being addicted to their work? What can be learned from an extensive reading of the literature on workaholism (see for example Burke, 2006; Kofodimos, 1993; Porter, 2006)? e.g. Do choices that users make with respect to favouring their work domains over non-work ones suggest deeper issues regarding their relationships with each domain?
- What are the broader cultural and societal forces driving such behaviours? Why do organizations support uses that can have negative impacts on their employees' personal lives (and potentially reduce overall productivity and effectiveness)? Why do employees feel such compulsion to remain connected to their offices and to work all the time? To what extent is supplemental work really necessary?

This chapter contributes to our understanding of technology enabled mobile work by

providing insights into the usage of mobile technologies to support supplemental work. By definition, supplemental work occurs outside the office, and with the advent of ubiquitous, user friendly communication devices, it can be, and is, done from anywhere, at anytime. The chapter shows that claims that mobile technologies facilitate work-life balance are one-sided, and applies border theory to explain how current uses can increase work-life conflict by materializing work and taunting family and friends with absent presence. Given that the adoption of mobile work extending technologies is expected to increase, it is important that all those affected by their usage consider how to make such usage more favourable to all.

There are more questions than answers at present. The convergence of supplemental work and mobile technologies raises complex issues that require much more nuanced analysis and a greater grounding in the literature than can be provided within a single book chapter. Issues of gender and power were not addressed here but must be considered. It is also important to determine the extent to which individuals and organizations are willing to move toward an environment of always-on, anytime, anywhere work. What do people really want, and how can they ensure that their needs are not subsumed by corporate agendas and unfettered, uncritical adoption of technologies? In 1988, Bailyn wrote that “Information technology makes it possible to free work from the constraints of location and time” (p. 149). Today the challenge is to free location and time from the constraints of work.

¹ Specific references are not provided for the data presented here. The author can provide full references for quotations upon request. Identifying information on individual BlackBerry users has been removed from the data.

² See <http://www.philipstreet.com/fisher/archives.html> for archives of the Fisher strip. BlackBerries feature in the comic strip April 7, 8, and 9, 2005, and again March 20 through March 23, 2007.

³ A search for ‘BlackBerry’ in the *Alex* archive

http://www.alexcartoon.com/index.cfm?section=archive_search returns many insightful comics about BlackBerry usage.

Bibliography

- Ashforth, B.E., Kreiner, G.E. and Fugate, M. (2000). 'All in a Day's Work', *Academy of Management Review*, 25: 472-91.
- Bailyn, L. (1988). 'Freeing Work from the Constraints of Location and Time', *New Technology, Work and Employment*, 3: 143-52.
- Brodtt, T.L. and Verburg, R.M. (2007). 'Managing Mobile Work – Insights from European Practice', *New Technology, Work and Employment*, 22: 52-65.
- Brown, B. and O'Hara, K. (2003). 'Place as a Practical Concern of Mobile Workers', *Environment and Planning A*, 35: 1565-87.
- Burke, R.J. (2006). *Research Companion to Working Time and Work Addiction*. Cheltenham, UK: Edward Elgar.
- Clark, S.C. (2000). 'Work/Family Border Theory: A New Theory of Work/Family Balance', *Human Relations*, 53: 747-70.
- Cousins, K.C. and Robey, D. (2005). 'Human Agency in a Wireless World: Patterns of Technology Use in Nomadic Computing Environments', *Information and Organization*, 15: 151-80.
- Downtown BlackBerry E-Mail Repository. Retrieved 28 July, 2007, from http://www.911digitalarchive.org/email/downtown_blackberry.html
- Duxbury, L., Higgins, C. and Coghill, D. (2003). *Voices of Canadians: Seeking Work-Life Balance*. Hull, QC: Human Resources Development Canada.
- Duxbury, L., Higgins, C. and Lee, C. (1994). 'Work-Family Conflict: A Comparison by Gender, Family Type, and Perceived Control.' *Journal of Family Issues*, 15: 449-66.
- Duxbury, L., Thomas, J.A., Towers, I. and Higgins, C. (2005). *From 9 to 5 to 24 and 7: How Technology Has Redefined the Workday*. Report Prepared for Industry Canada. Ottawa.
- Economist Staff. (2005). 'The CrackBerry Backlash', *The Economist*, 375: 78.
- Edwards, J.R. and Rothbard, N.P. (2000). 'Mechanisms Linking Work and Family: Clarifying the Relationship between Work and Family Constructs', *Academy of Management Review*, 25: 178-99.
- Ellison, N.B. (1999). 'Social Impacts: New Perspectives on Telework', *Social Science Computer Review*, 17: 338-56.
- Estates Gazette Staff. (2005, 15 October). *Season of Fruitful Technology*. *Estates Gazette*, p. 89.
- Felstead, A. and Jewson, N. (2000). In *Work, at Home: Towards an Understanding of Homeworking*. London: Routledge.
- Felstead, A., Jewson, N., Phizacklea, A. and Walters, S. (2002). 'The Option to Work at Home: Another Privilege for the Favoured Few?' *New Technology, Work and Employment*, 17: 204-23.
- Felstead, A., Jewson, N. and Walters, S. (2005). 'The Shifting Locations of Work: New Statistical Evidence on the Spaces and Places of Employment', *Work, Employment &*

- Society, 19: 415-31.
- Fleetwood, S. (2007). 'Why Work-Life Balance Now?' *International Journal of Human Resource Management*, 18: 387-400.
- Fortunati, L. (2002). 'The Mobile Phone: Towards New Categories and Social Relations', *Information, Communication & Society*, 5: 513-28.
- Gergen, K.J. (2002). 'The Challenge of Absent Presence', In J.E. Katz and M.A. Aakhus (eds.), *Perpetual Contact: Mobile Communication, Private Talk, Public Performance* (pp. 227-41). Cambridge, MA: Cambridge University Press.
- Golden, A.G. and Geisler, C. (2007). 'Work-Life Boundary Management and the Personal Digital Assistant', *Human Relations*, 60: 519-51.
- Golden, T.D., Veiga, J.F. and Simsek, Z. (2006). 'Telecommuting's Differential Impact on Work-Family Conflict: Is There No Place Like Home?' *Journal of Applied Psychology*, 91: 1340-50.
- Greenhaus, J.H. and Beutell, N.J. (1985). 'Sources of Conflict between Work and Family Roles', *Academy of Management Review*, 10: 76.
- Guest, D.E. (2002). 'Perspectives on the Study of Work-Life Balance', *Social Science Information*, 41: 255-79.
- Haines, M. (2000, 29 September). *Research in Motion - CFO - Interview: Transcript*. CNBC/Dow Jones Business Video.
- Hallowell, E. (2005). 'Overloaded Circuits: Why Smart People Underperform', *Harvard Business Review*, 83: 54-62.
- Hill, E.J., Ferris, M. and Martinson, V. (2003). 'Does It Matter Where You Work? A Comparison of How Three Work Venues (Traditional Office, Virtual Office, and Home Office) Influence Aspects of Work and Personal/Family Life', *Journal of Vocational Behavior*, 63: 220-41.
- Hill, E.J., Hawkins, A.J. and Miller, B.C. (1996). 'Work and Family in the Virtual Office: Perceived Influences of Mobile Telework', *Family Relations*, 45: 293-301.
- Hislop, D. and Axtell, C. (2007). 'The Neglect of Spatial Mobility in Contemporary Studies of Work: The Case of Telework', *New Technology Work and Employment*, 22: 34-51.
- Jackson, M. (2007, 3 June). *Keeping Work Where It Belongs*. *The Boston Globe*, p. G19.
- Jacobs, J.A. and Green, K. (1998). 'Who Are the Overworked Americans?' *Review of Social Economy*, 56: 442 - 59.
- Kahn, R., Wolfe, D., Quinn, R., Snoek, J. and Rosenthal, R. (1964). *Organizational Stress: Studies in Role Conflict and Ambiguity*. New York: Wiley.
- Kofodimos, J.R. (1993). *Balancing Act: How Managers Can Integrate Successful Careers and Fulfilling Personal Lives* (1st ed.). San Francisco: Jossey-Bass.
- Kossek, E.E., Lautsch, B.A. and Eaton, S.C. (2006). 'Telecommuting, Control, and Boundary Management: Correlates of Policy Use and Practice, Job Control, and Work-Family Effectiveness', *Journal of Vocational Behavior*, 68: 347-67.

- Kraut, R.E. (1989). 'Telecommuting: The Trade-Offs of Home Work', *Journal of Communication*, 39: 19-47.
- Lewis, S., Gambles, R. and Rapoport, R. (2007). 'The Constraints of A "Work-Life Balance" Approach: An International Perspective', *The International Journal of Human Resource Management*, 18: 360 - 73.
- Madsen, S.R. (2003). 'The Effects of Home-Based Teleworking on Work-Family Conflict', *Human Resource Development Quarterly*, 14: 35-58.
- Mazmanian, M.A., Orlikowski, W.J. and Yates, J. (2005). 'Crackberries: The Social Implications of Ubiquitous Wireless E-Mail Devices', In C. Sørensen, Y. Yoo, K. Lyytinen and J.I. DeGross (eds.), *Designing Ubiquitous Information Environments: Socio-Technical Issues and Challenges* (pp. 337-44). New York: Springer.
- Menzies, H. (2005). *No Time: Stress and the Crisis of Modern Life*. Vancouver, BC: Douglas & McIntyre.
- Middleton, C.A. (2007). 'Understanding the BlackBerry as an Instrument of Organizational Culture', *Continuum: Journal of Media and Cultural Studies*, 21: 165-78.
- Middleton, C.A. and Cukier, W. (2006). 'Is Mobile Email Functional or Dysfunctional? Two Perspectives on Mobile Email Usage', *European Journal of Information Systems*, 15: 252-60.
- Middleton, C.A., Scheepers, H. and Cukier, W. (2005). 'Exploring the Contradictions of Mobility: A Case Study of BlackBerry Users in Canada', In J.Y.L. Thong and K.Y. Tam (eds.), *Proceedings of the Hong Kong Mobility Roundtable* (pp. 299-309). Hong Kong: HKUST.
- Nilles, J.M. (1976). *The Telecommunications-Transportation Tradeoff: Options for Tomorrow*. New York: Wiley.
- Nippert-Eng, C.E. (1996). *Home and Work: Negotiating Boundaries through Everyday Life*. Chicago, IL: University of Chicago Press.
- Parks, B. (2006, 29 January). *Addiction, Withdrawal and the BlackBerry*. *The Star-Ledger*, p. 1.
- Porter, G. (2006). 'Profiles of Workaholism among High-Tech Managers', *Career Development International*, 11: 440-62.
- Porter, G. and Kakabadse, N.K. (2006). 'HRM Perspectives on Addiction to Technology and Work', *Journal of Management Development*, 25: 535 - 60.
- Ransome, P. (2007). 'Conceptualizing Boundaries between 'Life' and 'Work'', *International Journal of Human Resource Management*, 18: 374-86.
- Research in Motion. (2004). *Annual Report*. Retrieved 14 February, 2005, from http://www.rim.com/investors/pdf/2004rim_ar.pdf
- Research in Motion. (2005, 9 May). *BlackBerry Subscribers Surge to over Three Million*. Retrieved 1 September, 2005, from http://www.blackberry.com/news/press/2005/pr-09_05_2005-01.shtml
- Research in Motion. (2007). *Research in Motion Reports Second Quarter Results*. Retrieved 28

October, 2007, from http://www.rim.net/news/press/2007/pr-04_10_2007-01.shtml

- Rosman, K. (2006, 9 December). BlackBerry Orphans: The Kids Fight Back; Heavy Use of E-Mail Gadgets Is Spawning a Generation of Resentful Children. *The Globe and Mail*, p. B15.
- Schlosser, F.K. (2002). 'So, How Do People Really Use Their Handheld Devices? An Interactive Study of Wireless Technology Use', *Journal of Organizational Behavior*, 23: 401-23.
- Shumate, M. and Fulk, J. (2004). 'Boundaries and Role Conflict When Work and Family Are Colocated: A Communication Network and Symbolic Interaction Approach', *Human Relations*, 57: 55-74.
- Smith, D. (2006, 5 February 2006). BlackBerry Addicts Fear Total Blackout. *The Observer*, p. 22.
- Smith, I. (2005). 'Social-Mobile Applications', *Computer*, 38: 84-5.
- Sokol, J. (2006, 5 July). The Tale of a Man and His CrackBerry, Er, BlackBerry. *The Orange County Register*.
- Sorensen, C. (2007, 7 July 2007). CEO Balsillie Shrugs Off 'BlackBerry Killer'. *Toronto Star*, p. B1.
- Sullivan, C. (2003). 'What's in a Name? Definitions and Conceptualisations of Teleworking and Homeworking', *New Technology, Work and Employment*, 18: 158-65.
- Towers, I., Duxbury, L., Higgins, C. and Thomas, J. (2006). 'Time Thieves and Space Invaders: Technology, Work and the Organization', *Journal of Organizational Change Management*, 19: 593-618.
- Vascellaro, J.E., Yuan, L., Sharma, A. and Rhoads, C. (2007, 19 April). Disconnected and Discombobulated - 'CrackBerry' Outage Forces Users to Go Cold Turkey; Pause in 'Infernal Buzzing'. *The Wall Street Journal*, p. B1.
- Venkatesh, A. and Vitalari, N.P. (1992). 'An Emerging Distributed Work Arrangement: An Investigation of Computer-Based Supplemental Work at Home', *Management Science*, 38: 1687-706.
- von Hahn, K. (2004, 1 May). I'm a Blackberry Widow. *Globe and Mail*, p. L3.