Abstract

Information and communication technologies (ICTs), including mobile technologies, have significant implications for the management of work-life balance (WLB) (e.g. Perrons, 2003) and thus for sustainable work practices within organizations and society at large. Boundary theory (Clark, 2000) argues that individuals maintain boundaries between role identities (e.g. parent, worker) within different social domains (e.g. family, work), and that they regularly have to transition between these domains. WLB may reflect the effectiveness of this transitioning. ICTs have significant implications for the management of these boundaries, particularly as they open up new areas for interaction through mobility and through the potential provision of a variety of easily available connections. In this paper, we report on the findings of 15 social entrepreneurs’ video and interview data. In particular, we explore
and advance understanding of the individual experience of switching between roles and domains in relation to ICT use and connectivity.

1 Introduction

There exists widespread recognition in the information systems (IS) and organizational literatures that information and communication technologies (ICTs) have significant implications for individuals, teams, organizations, and societies (e.g. Panteli, 2009). In particular, it has been argued that contemporary forms of mobile technologies may challenge individuals' sense of work-life balance (WLB) (e.g. Middleton, 2008), as individuals increasingly work remotely (Hislop, 2008) and yet are expected to remain connected to their workplaces through the use of various ICTs (Reinsch et al., 2008). Using boundary theory, which suggests that certain boundaries separate our different domains and roles (Ashforth et al., 2000), our aim in this paper is to explore and contribute an improved understanding of whether the prevalent use of ICTs, and the emergent notion of connectivity along with its varying types and levels (Kolb et al., 2012), have a role to play in the transitioning process across those boundaries.

We conducted a qualitative study involving video diaries and interviews with 15 UK-based social entrepreneurs. Our study forms part of the Digital Brain Switch (DBS); a wider multidisciplinary (comprising both social and computer scientists) research project agenda, which involves two more user groups, and aims to both address the aforementioned aims and to develop technologies that will assist the user groups involved in managing their technology-influenced transitions across work, life and other boundaries. Our findings from both the qualitative study, which we present in this paper, as well as the wider multidisciplinary study involving the development of new technologies, are of cross-industrial significance and will have wider impact, including value to practitioners whose work shares similar characteristics with our participants. In what follows, we present relevant literature and explain our innovative methodological approach. Subsequently, we present the findings that have emerged from our analysis and discuss their implications for theory and practice.
2 Literature Review

Boundary theory suggests that different domains (e.g. family, work) are embraced within individuals’ lives and that individuals perform different roles (e.g. parent, worker) within each domain (Ashforth et al., 2000). The concept of role can be seen as a set of “behavioural expectations associated with given positions in the social structure” (Ebaugh, 1988, p. 18). Burke (2006) argues that all individuals have several role-based identities, each of which subscribes to different rules. Ashforth (2000) claims that typically individuals perform physical and/or psychological movements (or ‘role transitions’, as he refers to them) between their different positions; and identifies macro (more radical and permanent in character) and micro (when, for instance, shifting from a work- to a family-related role) role transitions.

Different types of boundaries (e.g. geographical, temporal) separate those different domains (Clark, 2000). Increasingly, however, scholars speak about the pervasive character of ICTs and the effects this may have on these boundaries, arguing that the increasing use of various ICTs influence the ways in which individuals manage the boundaries that separate their various personal and work-related roles (e.g. Sayah, 2013). For example, MacCormick et al. (2012) argue that the use of smartphones may give rise to new boundaries or may also render existing boundaries permeable. Recent literature reveals that it is to a large extent personal experience that characterizes the influence that ICTs have on boundaries and on WLB (Kossek et al., 2009; Richardson and Benbunan-Fich, 2011).

Much of this recent research literature has taken the case of teleworkers to examine whether, and the extent to which, ICTs, along with the benefits they offer, such as increased flexibility, influence boundaries between different domains. Hilbrecht et al. (2013) highlight that (a) the flexible, ICT-based, environment of teleworkers requires an additional need to contain work time and space; (b) family and availability for children often takes priority; and (c) the importance of leisure is diminished. Their findings support the view that, with the exception of women teleworkers with children, boundaries between work and life are renegotiated in view of the flexibility characterizing teleworkers’ ICT-based environments.
Other similar research focusing on teleworkers working from home reveals that some tend to segment work- and home-related activities, while others blend the two (Fonner and Stache, 2012). However, Sayah (2013) takes issue with that view, arguing that individuals cannot be classified as ‘integrators’ (those merging the domains of work and personal life) and ‘segmentators’ (those maintaining clearer boundaries between different domains). Of particular interest within this field has been the use and influence of particular technologies, such as Personal Digital Assistants (PDAs) and BlackBerrys. For instance, Golden and Geisler (2007) take the case of PDAs and highlight that PDAs can be used for both segmentation and integration of work- and personal-life. Duxbury et al. (2013) take the case of a Canadian organization in the pharmaceutical industry and make a distinction between ‘integrators’ and ‘struggling segmentators’, as they name them. They find that different approaches to constant connectivity and boundary permeability is often owed to: development of strategies of managing mobile devices prior to adoption; ability to change one’s strategy and prioritize home over work; and ability to self-control. In general, there are mixed views surrounding the role of mobile telephony for WLB. On the one hand, mobile devices—such as the BlackBerry—promise increased work productivity due to their offering the possibility to engage in various activities from different locations (MacCormick et al., 2012). On the other, they have also been found to cause discontent among family and friends (Middleton, 2008).

In another organizational context, Ruppel et al. (2013) begin to explain individuals’ relationships with ICTs within their selected organization. They show that among the global virtual team members, on whom they based their study, senior members prioritized ICTs that simply met the task requirements while protecting their WLB, over ICTs that would bring more satisfactory work results. Koch et al. (2012) recognize that work-life boundaries are oftentimes blurred in our era of high connectivity. They argue that use of specific ICTs that permeate the boundaries between personal and work-related activities creates positive emotions that in turn lead to a sense of well-being and also increase organizational commitment.

The literature on connectivity identifies different dimensions (e.g. geo-physical, technical, organizational) (Kolb, 2008) and states (e.g. hypo-connectivity, hyper-connectivity) (Kolb et al., 2012) of connectivity. However, it is not known how these
different dimensions and states of connectivity afforded by the different ICTs influence our ability to switch across roles and domains. Further, extant literature hints at links between connectivity and WLB; for instance, Richardson and Benbunan-Fich (2011) assert that work connectivity is higher after-hours for those who have wireless enabled devices (WEDs), though individual and also organizational factors were found to play a role in this.

It follows that despite (a) the acknowledgement that ICTs have an influence on issues of WLB, and (b) the various studies that have been conducted so far in this field, our understanding of the personal switching experience across different roles and domains remains limited. As such, our aim in this paper is to explore how different ICTs, and the varying types and levels of connectivity afforded by the different ICTs, influence transitions between roles (e.g. parent, worker) and domains (e.g. family, work). This aim falls within a wider set of aims within the DBS project, which embrace a quest for better understanding of WLB in relation to ICTs.

In what follows, our focus is on the switching experiences of social entrepreneurs in particular, whom we see as suitable participants for our study. We now turn to discuss the methodological approach we developed in order to explore the issues of WLB, transitions, connections and mobility.
3 Methodology

We conducted a qualitative, interpretive study involving video diaries and follow-up interviews with 15 individuals, within a wider, on-going study which involves 45 individuals in total from three different user groups. By collecting both video and interview data, we overcome some of the limitations characterizing each of the two data collection methods when used separately. In particular, by considering our own interpretations of the participants’ actions (through analysis of their videos) and the participants’ own perceptions (through the interview data), we develop a more complete picture of the phenomena under investigation, in line with the principles of interpretivism. In the following sections, we present the participants in our study and explain the way in which the video and interview studies were conducted.

3.1 The participants

We recruited 15 social entrepreneurs for this study. Social entrepreneurs have been defined as “[individuals who work for] both for and not-for-profit organizations, as well as public sector bodies, though [we exclude] all organizations whose primary purpose is profit-maximization, irrespective of whether they also aim to do social good” (Journal of Social Entrepreneurship homepage, 2010). We focused on social entrepreneurs, because we view this group as potentially particularly challenged in their WLB management and switches between connections, as they are pursuing a social impact agenda in their work to which they may feel very committed, and may work closely with their own social network in pursuing their work goals. Thus, they may find it difficult to detach from their work, feel a requirement to stay available through various connections at all times, are likely to be mobile workers who have no regular office location and may be required to be active on various media to constantly promote their cause(s).

Participants were recruited via a range of methods, involving direct email to members of social enterprise networks based in specific geographical UK locations, circulating the recruitment flyer to a variety of organizations that host entrepreneurs, personal contacts of research team members, and dissemination via the social media accounts of a number of UK-based social enterprise membership organizations and the twitter account of the research project. Recruited participants were sent an information sheet which outlined the wider research project, its aims, and what their
involvement would entail. They were also invited to a briefing session, in which they were given the camcorder for the video component and detailed instructions on the process of participating. All participants then signed consent forms with full knowledge of the nature of their participation. The research team also maintained a dedicated project email account to which the participants could direct queries. The participants in our study are presented in Table 1 below. Subsequently, we move on to explain how we collected the video and interview data and how these were analysed.

**Table 1. The participants in our study**

Table obscured for confidentiality.
### 3.2 Video Data Collection and Analysis

Participants were asked to undertake a week’s ‘video diary’, one that focused on their different roles in the various domains of their lives and how they switched (or tried to switch) between them, in both their digital and physical worlds. We used a mixture of one-to-one and group briefings to instruct the participants on what was required, dependent on participant availability. These briefings were mostly conducted via Skype with the camcorder being posted to the participants in advance. A few were face to face. The approach required them to capture in real time what they saw in front of them rather than to narrate these switches retrospectively, though it was explained this would be a useful supplement to switches that were too difficult to capture as they happened. We invited them to experiment with the brief, stressing that it was up to them how to record the material and to be creative in how they approached the task. Copies of the Briefing presentation and all other participant documentation were also made available to download from the project website which also featured a series of FAQ. The research team also maintained a dedicated project email account to which the participants could direct queries. Participants were asked to retain a copy of their video data for them to review prior to a later face-to-face interview.

At the end of the week of recording, we contacted the participants to arrange collection of the camcorder and data via courier and to fix a time for a short debrief over the phone or Skype. These were short conversations, usually lasting about 10 minutes, occasionally longer. Originally included as part of ethical good practice to check on participants after taking part, we asked them to reflect on their experience of the video study. We took contemporaneous notes (subsequently typed up) of the conversation as we knew from the pilot study that these reflections were useful and interesting. For example, two participants in the main study commented in the debriefing on how the camcorder had become an ‘invisible friend’ during their week of recording. Others reflected on what they had observed or learnt about themselves during the week of recording or on how they would approach it differently with the benefit of hindsight. There was further opportunity for exploration of these issues at the subsequent interview.
The initial step in the analysis of the video data was a review of each participant’s films, assessing quantity, film quality and scope of content of the footage. It was at this stage that we noted creative options adopted by participants (e.g. interviewing their family members for their perceptions about work life balance issues) and how they had interpreted the brief. After an initial viewing of the data for familiarisation, a selection of longer, analytically interesting videos were professionally transcribed, with very short video clips being transcribed by the researcher. Both the video data and accompanying transcripts were imported into NVivo.

An analysis plan for both the video and interview data was developed by the research team conducting the two studies following this initial review and familiarization. This broadly followed thematic analysis (Braun & Clarke, 2006) and started with identification of very broad umbrella codes which were agreed between the two research teams. The video data was then coded in a systematic fashion across the entire data set, collating data relevant to each umbrella code e.g. Technology or Work life balance. Within these codes, we then analysed the data for themes e.g. Connectivity (within the umbrella code of Technology). At this stage we developed a thematic map of codes and themes using mind map software, Simple Mind, as a basis for further comparison and discussion between the research teams. More detailed analysis followed (undertaken independently by the two research teams to refine the specifics of each theme within their data set. This involved generating definitions and names for each theme and selecting of compelling extract examples.
3.3 Interview Data Collection and Analysis

The aim of conducting the interviews was to consider the participants’ perceptions of switching across role-identities and domains in relation to their use of ICTs. The interviews were conducted in university meeting rooms, providing a friendly, quiet and confidential environment for the participants to share their experiences. Each interview was recorded using a digital audio recorder. The interviews lasted around one hour and were semi-structured in nature (Wengraf, 2001).

On the one hand, a generic interview set of questions was developed, involving questions around the interviewees’ background, sense of WLB, and switching experience. These open-ended questions followed a narrative approach (Maitlis, 2012), encouraging participants to share their views and experiences about the aforementioned issues in a holistic and detailed manner. The interviewees were also asked to elaborate on a selection of their own videos, which were incorporated in each interview. Specifically, 3-5 video excerpts were selected for, and incorporated in, each interview by the research team. The criteria used for video excerpt selection entailed, among others: unplanned switches (e.g. interruptions); routinized and/or habitual switches; instances where switching is found to be problematic (difficult to switch, not fully switched); instances where switching appears to have taken place but not acknowledged; and switching between the virtual and the physical world enabled by the participants’ state of connectivity.

We sent all interviews for professional transcription and then used QSR NVivo 10 to support our data management and analysis. Further to the interview transcripts the NVivo file comprised additional information, i.e. a log-sheet that was developed by the interviewers after each interview, reflecting on how each interview went and what issues were felt at the time to be of importance for analysis; the researchers’ notes from the short debrief phone call following the video study; and each participant’s website of their social enterprise (where applicable), which gave us further insights. and have begun to analyse our data thematically, following an open coding approach as a starting point (Braun and Clarke, 2006). More specifically, we identified larger themes (broad categories) with regard to the phenomena under study and we subsequently developed codes describing emerging issues that were found to be of relevance to our study. We must also note that the different datasets (video and
interview data) will not be used for triangulation, but rather for completeness purposes, in our quest to sketch a richer picture of the phenomenon under investigation and in line with the principles of interpretivism in qualitative research (Tobin and Begley, 2004).

We now turn to present the findings that emerged from our analysis.
4 Analysis and Findings

In this section, we present the findings that emerged from our analysis. In particular, we focus on the different types of transitions we identified and discuss them in relationship with the issues of technology and connectivity.

Technology and transitions

Our data suggest that technology gives rise to a new, virtual environment, in which what would previously be viewed as domains pertaining to either work or personal life are now coexistent and in some instances in our data not easy to detect as separate without commentary from the participants. Instead, these new environments allow for both personal and work activities to occur in the same virtual environment with little separation. For example, we observed that several of our participants engage in both work and personal emails simultaneously using the same platform. This suggests a potential lack of salience regarding the concept of switching between the domains of work and personal life if the domains are not separated. However, technology creates new categories, such as tasks that cover what might otherwise be seen as the different domains of work and personal life. For example, in the quote from one video below the participant uses the term ‘doing all my online stuff’ to refer to a mix of work, personal and social activities:

“I wrote those ideas for the blogs [part of the participant’s work role as a social entrepreneur]. Then I just thought, oh I’ll just email Judy, let her know, and then checked my emails and deleted everything. And there was an offer on Mountain Warehouse and I bought myself some new walking boots because my walking boots, as I’ve mentioned it’s my birthday on Saturday, so they’re being delivered. And then I went online and sorted out [an event] for Saturday night followed by a meal for a group of us. So that’s all my online stuff done now hopefully for the day. I’ll probably just check-in, I don’t know, Facebook, Twitter, something like that later on.” (Jane, video data)

Other participants similarly referred to the task of ‘checking my emails’ to mean using a single device such as an iPad to check several different emails accounts (e.g. work, personal, and one related to a voluntary role), without necessarily
conceptualising these as ‘switches’ or ‘transitions’ as they moved between the different accounts.

To further illustrate the above, in the first screenshot of Figure 1 below we show how a digital boundary is developed within the same device when a participant views their personal and work calendars on the screen. In the second screenshot, the participant uses the device that is meant to be used for work, for leisure. These findings problematize the divide found in the literature between the different roles and domains by contributing an alternative view suggesting that ICTs can give rise to a situation whereby individuals are simultaneously engaged in activities relating to different connections and domains.

Figure 1. Screenshots showing how individuals engage in different activities through ICT use
Others were more conscious about the transitions they were performing and the influence of technology on them. For example, the participant below explains how he quickly he transitioned between work and personal activities on his laptop, highlighting the flexibility of these transitions in an online environment:

“Just checking things quite quickly without getting into them as I’ll come back to them later…ok, quite a bit to do there then, but one of the key reasons that I’ve just flicked on [the camcorder] at this particular stage is that this I’m also going to swap now to do some personal stuff. So I’m online and I’m just going to go to my bank and I’m going to pay the credit card bill. So a quick look at work, I’m going to sort the credit card bill, then get some lunch and then we’ll come back and get into those emails hopefully before the 2 o’clock phone call comes in.” (Stephen, video data)

As it follows, technology in these cases was found to either (a) replace transitions between the domains of personal life, work, family etc. with transitions between the online/virtual (encompassing a mix of different activities) and the physical environment, which were found to be more prominent in our findings; or (b) enhancing flexibility of these types of transitions.
Constant connectivity

A number of participants talked about their relationship with different forms of technology, referencing their need to be constantly connected, for example:

“Um, my morning routine: I wake up, my alarm goes off, I hit the snooze button a couple of times. Um, then I check [LAUGH] my emails. Um, that’s one of the problems, I love being connected all the time, I love having my devices with me, I rarely, I never go anywhere without at least my phone. Um, if it’s out of my sight for a few minutes, I get a bit anxious which is really bad, I guess, but yeah” (Sally, video data).

But the same participant also recognised that to take a break at the weekend, she needed to create boundaries, for example, through not replying to ‘non-urgent’ work emails (even if she had taken time over the weekend to read them):

“I always check my work e-mails. They’re available on my phone and my tablet. Um, sometimes I answer, it’s weekend now, so it depends if it’s something urgent I’ll answer it, if it’s something that can wait till Monday, I’ll check it out, but I’ll generally leave it, because I don’t want to give my clients the idea that I work weekends! Because, you know, everybody needs some down time” (Sally, video data).

Figure 2. Participant checking emails on arrival early at a meeting
In the case of one participant who had lost his mobile phone just before starting his video diary, he describes the feelings he experienced being at the theatre without his phone:

“one of the things I forgot to mention is that when I was worrying, during the play, about sending emails, trying to be back and present in the moment and not thinking about the work or the stuff that I had to do, but I have been feeling a sense of almost overwhelm … I don't know if it's stress, or panic, but kind of my heart accelerating, a bit of a sensation in the chest around the idea of having my email just keep on pouring, and not being able to use my phone to quickly reply, having to wait until I connect, and one of the first things I did, when I got back home, even before I went to the loo, was to get my laptop out, plug it in, and make sure that my emails were out of my outbox” (Mark, video data)

The ‘Crackberry’ literature, (e.g. Ladner, 2008; Middleton, 2008) around PDAs rehearses the potential addiction to these devices, even if users themselves deny such reliance. This participant clearly articulates both the physical manifestations of not being able to be connected (via his mobile) and his own awareness of his ‘absent presence’, his struggle to be not just physically present in the theatre but to be ‘in the moment’. He recognizes that when he has his mobile with him, it demands his attention at the expense of conversations with those around him. In the following excerpt he contrasts this with a bus journey with his girlfriend without his mobile:

“because I didn’t have my phone, the quality of my conversations with my partner, for example, on the bus were way more focused, because I didn't need to worry about I could be checking my emails now, or, I could be checking my social media, or I could be checking now what's being said out there, and instead I was having, like, a deeper conversation about stuff that was going on, and the conversation that was needed” (Mark, video data).

Other participants also recognised the same phenomenon, their ‘absent presence’, for example, when they are at home and with their children, but not really ‘there’.
Switching off and connectivity management

Further to switching between roles and domains and the pressure to be ‘always connected’, most participants also spoke about their need to switch off. In general, although switching off was seen as important by the participants, many found it challenging. Our participants talked to us what switching off means to them and a representative view was the following:

“This is going to sound fluffy, but it's just to be content, just to be at peace. Switch off is to be at peace. It's like that. That for me is switch off. It's like you know what? I don't need to do anything, I can just be, and when you switch from doing to being, I think that for me is the switch. It's like yes, I've got a thousand emails, yes I've got a blog to write, yes I've got my book to write, I've got to call back a client, I've got to control a meeting, yes, but switching off, it's over, boom.” (Mark, interview data)

Overall, there was a view that technology creates a sense of constant creativity that was found to affect our participants' ability to switch off. Because of that, the participants often found themselves in a position of not being able to be enjoy the moment:

“So, you are constantly, constantly on […] It came to the point where I used to feel my leg vibrating, even if I didn't have my iPhone in my pocket. That's how bad it became […] you hear like a ding, like it's my email, and I'm thinking I've just got an email I need to go check […] I'm not as connected and present with the people when I go out. I'm thinking about I've got so many things to do, I've got to do this, I've got to do that, and it's very difficult for my friends and my family and my partner” (Mark, interview data).

Though different participants seemed to have different approaches to managing their switches, most recognized the importance of disconnecting in order to be able to switch off. Most commonly, this was achieved by a physical activity that took place away from technology:

“[A walk in the park] offers an alternative place to think and when I walk I can solve problems and think about problems in a different way.” (Cressida, video data)
“So I’m back from my walk and as I said walking the dog helps me to clear my head and part of that is getting new ideas.” (Jane, video data).

This participant also suggested scheduling time away from digital technology as an important part of WLB.

“We’re on [name of lake] and it’s so beautiful and who the heck wants to sit in an office ... I know we're bunking off but bunking off is important to get away from the digital world for a day, really important for everyone. So instead of meat-free Monday, we can have digi-free Friday. I like it!” (Jane, video data)

Figure 3. Screenshot of participant’s walk in countryside with friend

Another tactic that we posited in our findings is that though our participants were found to be largely connected and available through the various ICTs they use, they created impressions of unavailability in order to switch from one task to another. As the following quote suggests, this participant has set an out-of-office reply so that she is not expected to reply immediately and be able to get on with her other activities:

“Technology is, I’ve been thinking about this a lot actually, the last few weeks. Technology is there all the time. And I don’t know if that’s a good or a bad thing. So,
the last couple of weeks, because I’ve got deadlines at uni, with exams and then essays. I’ve, on my email, I’ve put an out of office sort of thing that says I’ll be checking my emails at nine am and eight pm. If you need me urgently, contact me on the mobile. So, although I won’t be doing that, because I’ll still be checking the emails, the impression I’ve tried to create, is that I would not respond to them. Until after those times. To try and cut down on that kind of constantly available emails, all the time. Because people expect you to respond instantly. And that’s my own fault, because I do, a lot of the time. So I’m trying to, a friend of mine had done it, and I thought that’s a really good idea, I’m going to do that. But it doesn’t work. Because people will contact you on the mobile.” (Rachel, interview data)
5 Conclusion

We began our study with the aim of improving understanding around how the use of ICTs in our era of high connectivity influences transitions between different roles and domains. We did so by using boundary theory, which suggests that boundaries separate the different roles and domains (Ashforth, 2000). We therefore conducted a qualitative study focusing on 15 UK-based social entrepreneurs and collected data through an innovative and robust methodological approach involving video diaries and interviews. Overall, our findings contribute to relevant literature on connectivity (e.g. Richardson and Benbunan-Fich, 2011) by starting to explain the relationship between technology and connectivity, and the experience of transitions between different roles and domains. In particular, the three thematic areas that emerged from our analysis relate to (a) technology and transitions, (b) constant connectivity, and (c) switching off and connectivity management. For example, our findings highlight that ICTs give rise to a virtual environment which merges activities (e.g. email communication) relating to domains that in the physical environment are seen as separate. In addition, our study reveals different approaches to the issue of constant connectivity; from issues of potential addiction (e.g. Middleton, 2008), through to an emergent need to create boundaries and ‘switch off’.

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