INDIVIDUAL BOUNDARY MANAGEMENT: AN EMPIRICAL INVESTIGATION ON TECHNOLOGY-RELATED TACTICS

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INDIVIDUAL BOUNDARY MANAGEMENT:
AN EMPIRICAL INVESTIGATION ON TECHNOLOGY-RELATED TACTICS

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Abstract

Elevated through the increasing digitalization, employees are expected to be available always and everywhere. According to boundary theory, individuals can manage their boundaries between work and private life on a continuum of integration and separation. As individuals have different preferences for integration or separation, they are implementing IT tactics to meet their preferences. However, there is a lack of research addressing this topic. Therefore, we used an exploratory approach using tools from grounded theory in order to detect IT-related tactics which employees use to manage their boundaries between work and private life in a way that is in line with their preferences. We identified six tactics that varied in their ability to foster integration or separation and could be administered either manually or automatically. These tactics ranged from physical detachment in which employees separate work and private life manually through creating distance between the device and themselves up to dynamic filters with which the device automatically filters messages from different people and lets only relevant messages come through.

Keywords: Boundary Theory, Boundary Management, Individual IT Tactics
1 INTRODUCTION

Due to the technological evolution of mobile technologies including smartphones, tablets and wearables, job-related tasks can be performed nearly anywhere and anytime (Karanasios & Allen 2014; Reyt & Wiesenfeld 2015). According to a forecast from the International Data Corporation (IDC) in 2015, mobile worker population will grow steadily in the next years, increasing from ca. 96 million in 2015 to over 100 million mobile workers in 2020 – only in the U.S. By the end of the forecast period, mobile workers will account for almost three quarters of the total U.S. workforce (IDC 2015). Key drivers behind the growth of mobile workers includes reduced prices of smartphones and tablets combined with the growing acceptance of corporate bring your own device (BYOD) programs in organizations (IDC 2015). Additionally, technological innovations such as wearables, near-field communications (NFC), voice control and augmented reality are enabling workers to increase their productivity by optimizing communication along organizational workflows (IDC 2015).

Based on the technological advancement, there is a fundamental change with regard to workplace design, i.e. working times are getting more flexible and workplaces are getting location-independent. Therefore, organizations are facing new demands, norms and a cultural change. Concepts like BYOD (“Bring Your Own Device”) and IT-Consumerization (Köffer, Ortbach, Junglas, Niehaves, & Harris 2015) are well-known examples and force organizations to rethink their policies and cultures with regard to the organizational use of technology.

Previous research on the use of mobile technologies has found both positive and negative effects on an individual’s work and private life domain (Allen, Cho, & Meier 2014). Besides positive effects (e.g. increased productivity in business tasks (Cecchinato, Cox, & Bird 2015; Cousins & Robey 2015; Duxbury, Higgins, Smart, & Stevenson 2014; Fleck, Cox, & Robison)), tensions between work and family domains (Kreiner et al. 2009) can have a negative impact on an individual, resulting in stress or work and private domain overload (Kreiner, Hollensbe, & Sheep 2009). Individuals may lose control over their boundaries between work and private life domains (Jackson et al. 2006) resulting in a change from “work anytime and anywhere” to “work all the time and everywhere” (Cousins & Robey 2015; Davis 2002).

In the last decades, researchers have used boundary and border theory to analyse how individuals manage boundaries between work and family domains. Different boundary management tactics, styles and strategies have been developed (Allen et al. 2014). For example, Kreiner et al. (2009) describe different tactics priests use to leverage their technology in order to organize their boundaries within behavioural tactics. Findings of Duxbury et al. (2014) of the adoption and use of Blackberry smartphones indicate that successful boundary management depends on the development of a strategy in order to manage the device prior to adoption. However, research on technology related boundary tactics is sparse. Against this background, the objective of this study is to facilitate greater understanding of individual tactics to manage the boundaries between work and private life domains using information technology.

To answer this objective, the paper is structured as follows. First, we will define and describe the core themes of our study, namely boundary and border theory, and will explain how they have been used in general and in IS literature specifically (Section 2). After explaining our methodological approach (Section 3), we will present our findings in Section 4. In section 5, we will conceptualize and integrate our findings and discuss them in terms of potential generalisation beyond our area of interest (Section 6). The paper concludes with an outlook, formulating the limitations as well as implications for future research and practice (Section 7).
2 RELATED WORK

2.1 Boundary theory

Boundary theory (Ashforth, Kreiner, & Fugate 2000; Clark 2000; Nippert-Eng 1996; Reyt & Wiesenfeld 2015; Rothbard, Phillips, & Dumas 2005) refers to the way in which people try to create, maintain, change, simplify or order their environment. Specifically, boundary theory focuses on boundaries between roles. Katz and Kahn (1978) outline roles as expectation, placed on an individual in a social system. Therefore, in the context of our study we use the term boundary to describe a limitation of space and edge of a role, varying on a continuum from thin to thick (Allen et al. 2014; Kreiner et al. 2009). Thin boundaries are associated with being weak and open to influence, whereas thick boundaries are supposed to be strong and not influenceable (Ashforth et al. 2000; Hartmann 1991).

Boundary theory has been used in different contexts e.g. psychology, organization theory and political science (Kreiner et al. 2009). Based on a cognitive theory of social classification with the focus on how people prioritize work and home (Allen et al. 2014) boundary theory evolved from sociological work of Nippert-Eng (1996). When applied to the work and family literature, boundary theory describes key challenges individuals face, managing work roles (e.g. as an employee) and family roles (e.g. as a parent) and the transition between those two roles, as they are defined as distinct from one another (Ashforth et al. 2000; Hall & Richter 1988; Kossek & Lautsch 2008; Nippert-Eng 1996). The transition between those roles, as described above, can be of a psychological or physical way and can differ, regarding an individual’s preference in terms of their flexibility and permeability (Ashforth et al. 2000). Due to the variance of transitions a continuum of border demarcation arises, showing on the one-hand integrators, (individuals, drawing a thin line between work and family roles) and on the other-hand separators (individuals, drawing a thick line between work and family roles) (Nippert-Eng 1996). Ashforth et al. (2000) further distinguish between macro (infrequent, involving permanent change) and micro transitions (frequent, involving routine activities).

2.2 Boundary management – preferences, tactics and styles

Research of boundary theory states that there is a difference between boundary preferences, tactics and styles. Kreiner (2006) describes boundary preferences as an individual’s preferences of either implementing or segmenting aspects of work and private life domains. An important aspect is that an individual’s preference describes the wish of an ideal boundary management. Therefore, individuals use tactics to create their preferred style of segmentation or integration (Kreiner et al. 2009). Whereas the boundary preferences refer to the integration or segmentation preference, the boundary styles refer to the actual enactment of integration or segmentation (Kossek, Rudermann, Braddy, & Hannum 2012).

Kossek and Lautsch (2008) identified three different boundary management styles: integrators (blending work and family domains), separators (dividing work and family domains) and volleys (switching between those two strategies). In order to define boundary management in more detail, different frameworks developed over time (Allen et al. 2014). Allen et al. (2014) identified two lines of research that arose based on Kossek and Lautsch (2008). One line identifies specific boundary management tactics (Kreiner et al. 2009; Sturges 2012) whereas the other line analyses boundary management styles (Ammons 2013; Kossek et al. 2012).

Kossek et al. (2012) defined six different clusters that can be used to classify individuals that describe how an individual manage its personal preferences of boundary styles. These six clusters (“work-warriors”, “overwhelmed reactors”, “family guardians”, “fusion lovers”, “dividers” and “nonwork-electrics”) differ regarding their control of demarcation, focus on work or family domains and break-behaviour of boundaries (e.g. “fusion lover” and “nonwork-electrics” have a high control in contrast to “work warriors” and “overwhelmed reactors”, whereas “fusion lovers” and “overwhelmed reactors” both focus on both work and family and “work warriors” and “nonwork-electrics” describe the ends of boundary continuums) – focusing on either work for “work warriors” or maintaining a small
identification with their family for “nonwork-electrics”. Break-behaviour of “work warriors” is defined by a high permeation from work to private, whereas “overwhelmed reactors” are described by a break-behaviour in both directions – work and family. “Fusion lovers” and “nonwork-electrics” tend to integrate both break-behaviour patterns allowing work permeation during family time and the other way around (Kossek et al. 2012).

Since individuals are able to actively change their boundary style, Kreiner et al. (2009) describe tactics individuals use in order to design their preferred living of work-home integration and segmentation in daily life. These tactics can be of behavioural (e.g. involving other people), temporal (e.g. controlling work time), physical (e.g. managing separate artifacts for work and family domains) or communicative style (e.g. confronting boundary violaters either during or after a violation (Kreiner et al. 2009).

We carefully note that some work has been done in extant literature describing boundary management tactics using information technology. For instance Kreiner et al. (2009) describe a micro-category called “leveraging technology” which is a sub-category of behavioural tactics. This micro-tactic is linking directly to the use of information technology to manage boundary strategies. In his comprehensive study with Priests, they identify the use of voice-mail, caller ID, e-mail and the Palm Pilot Calendar as technologies that help them to facilitate their boundary management. Similarly, Duxbury et al. (2014) discovered individuals as not being able to segment between the two domains due to a lack of self-discipline and self-control when using smartphones (e.g. Blackberry). Köffer et al. (2015) found six technology-related aspects (dual use of company IT for private task, dual use of private IT for work tasks, remote access to work data, distinct devices for private and work purposes, separate private and business accounts and quality of company provided IT), explaining the intensified professional use of IT. They concentrate on IT which was originally developed for the consumer market to manage boundaries between work and private life domains. Cecchinato et al. (2015) observe the use of e-mail accounts across devices to manage boundaries in more detail, finding micro-boundary strategies in e-mail management.

Although there has been significant research in the field of boundary management so far, only limited research addresses technological aspects on boundary management. Against the background of technological advancement including the emergence of IT Consumerization previous research show that technology influence boundary management (Köffer et al. 2015). Consequently, more research is needed to shed light on technology related boundary management.

Therefore, we want to bridge this gap by further differentiating information technology micro-tactics. In order to identify these tactics, we conduct an explorative study with the objective to uncover IS tactics used by individuals to manage their boundary styles. Taking a qualitative approach, we build on the foundation of Kreiner et al. (2009), Kossek et al. (2006), Köffer et al. (2015) and Cecchinato et al. (2015) and extend current research by including technology related aspects. In order to address our aim, our research is guided by the following research question:

**RQ:** How do individuals use IT in order to manage their boundaries between work and private life?

### 3 RESEARCH METHOD

**Method selection.** Although various studies from psychology and organizational science already explored and analysed individual tactics and strategies to maintain boundaries, information systems research did not exploit the full potential of boundary theory so far. Therefore, this research pursues an explorative approach, to gain insights on how individuals use information systems to implement boundary management tactics. Based on the explorative nature of this study, we made use of tools from grounded theory methodology (Glaser & Strauss 1967; Urquhart, Lehmann, & Myers 2010) which is explained next.

**Data collection.** We conducted a total of 15 interviews (10 males, 5 females). The participants were selected out of different organisations including industrial sector, financial sector, IT-business and public sector. An overview of the interviewees is presented in Table 1.
Do you separate private and business technology? Most businesses, employees, having two devices.

Table 1. Overview of Interviewees

<table>
<thead>
<tr>
<th>Position</th>
<th>No of Interviewees</th>
<th>Average work experience in years</th>
<th>Number of the interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee</td>
<td>9</td>
<td>6</td>
<td>1, 2, 3, 4, 5, 7, 8, 11, 13</td>
</tr>
<tr>
<td>Manager</td>
<td>6</td>
<td>14</td>
<td>6, 9, 10, 12, 14, 15</td>
</tr>
</tbody>
</table>

We conducted a two-step approach to conceptualize individual tactics. First, we conducted four semi-structured interviews. We included open questions like “Do you separate private and business technology?” or “What are technological approaches to meet your boundary preferences?” In this first round, we interviewed doctoral students from the business faculty (employees), because they are provided with mobile technologies and they have a great degree of freedom on how, when and where they work since they are generally managed by objectives.

Based on this first step, we further adapted our questions. We continued by interviewing another eleven individuals from industry. To get insights from different hierarchies, we included both employees and manager. Furthermore, we particularly included practitioners with working experience (9.2 years of working experience in average) to capture individual strategies that have been already implemented.

Data analysis. Following the grounded theory approach, we analysed the data beginning with open coding (Corbin & Strauss 1990; Glaser & Strauss 1967). Three of the researchers implemented the procedure of open coding independently. They read the transcribed interviews and proposed codes that represent the content. Afterwards, similar codes were collected out of the interviews and grouped as a common denominator what is known as axial coding. For instance, for the subsequent citation “I own an IPhone and it is equipped with the tool to only permit phone calls from people which I chose, at the times which I selected.” (Interview 1), three independent codes (“filtering”, “manage communication”, and “automatic filtering”) were found. Finally, “filtering” was used as an axial code. Disagreements were discussed with the remaining researchers and settled by a mutual agreement.

We finished our process when all researchers agreed that there is only little chance that new essential concepts would emerge. Since our data highlights key aspects of the integration or separation between work and life, we finish our analysis by relating our results with existing literature (theoretical coding, Section 5).

4 FINDINGS

Physical detachment. Kreiner et al. (2009) analysed physical tactics describing dismantling local boundaries between work and private life domains. However, Kreiner et al. (2009) did not link physical tactics to IT. When looking at the interviews, we noticed that employees, having two devices, for example a private device and a corporate device, tend to separate between those two devices. Most commonly, they separate based on the ownership. Therefore, the corporate owned one is exclusively used for work and the private device in exclusively used for private purposes. The following excerpt illustrates this behaviour:

“Ultimately, that’s why I own two smartphones, one for work and one for my private matters. The same for computers. Generally, I respect the separation to use the company device only for work related issues and my private phone or laptop for everything else. [...] Well, that means, I keep the usage of my private device for company matters to the minimum. I would glance at emails via a SharePoint, but I would never download an Outlook Client to have fully access to my company emails.” (Interview 12)

For example, when looking at the private life domain, ways to foster separation using mobile devices could consist of leaving the corporate device at work, switching it off or to turn it to a silent mode. The following quote shows an individual separating using two ways. First, the silent mode is used in order to prevent interruption. Second, he puts the corporate smartphone aside in order to prevent a confrontation with checking it for notifications:
“After my working time, when I am at home or in the gym, I put my phone away – in silent mode– then I don’t realize that a message or a call came in and I won’t answer it.” (Interview 15)

Automatic notification. As technology enables the automatization of processes, it also opens the door for the individual boundary tactic, especially, in terms of communication applications there are prevailing ready-to-use configurations to define automatic notifications for instance in terms of absence times. A common use of automatic notifications can be found in E-Mail applications. The following excerpt describe how one employee use automatic E-Mail notifications.

“I assigned my email account to automatically answer received emails with the message “Thank you very much for your email, however right now I am unable to answer it, I will be back on XY-day.” Obviously, after this email is sent and I return, I will check back to answer it appropriately. Then, of course, it will be my problem.” (Interview 13)

Although this excerpt illustrates how automatic notifications can be used, it also emphasize the importance of individual behaviour. Conclusively, if an individual uses that tactic to separate, at this point, technology does not enforce a strict separation.

Pull information. There are different ways of getting access to phone calls, e-mails and further information and notifications. Pulling information describes an individual’s behaviour to inquire their current notifications. One way is described as choosing where and when to get access to information and notifications. One employee describes his preference to pull e-mails from web account browser in order to be able to decide when and where to check e-mails:

“I determine the time. […] That’s why I usually use the browser to access my emails. Using the online account, I decide when to check work emails.” (Interview 13)

Another employee states his preference on pulling information as viewing notifications on his smartphone, when turned on the silent mode, anytime and anywhere he prefers to:

“Most of the time, my private phone is in silent mode. Now and then, I would check if someone texted me and I would answer, although I am at work. It also depends on the moment, if I am very busy or if I have a little downtime to check my messages.” (Interview 9)

Pulling information is described by another employee as a routine defining when and where to check e-mails regarding, working together across different time zones: As different time zones implicate the possibility to get e.g. e-mails anytime, anywhere from everywhere, the employee talks about a routine behavior in order to cope with this permanent flow of information. He talks about a routine describing to pull information when you want to but to answer only if you need to:

“As I said, the time in China is 4 am when it is 10 pm here. On the other hand, it is 10 pm here in Germany when it is afternoon in the U.S.. Since my company has offices everywhere, I could receive an email in the middle of the night. The message will be read, but by now, the routine is there.” (Interview 10)

Push Information. Another way on getting information is not to decide when and where to access these information but rather just let these information go through anywhere and to anytime. In temporal intervals, e.g. e-mails being automatically queried, an individual gets to know new notifications using vibration or sounds to signalize these. An employee illustrates below how his e-mails are pushed anywhere at anytime:

“I receive every message. I don’t block out any notification. The internet on my phone is not shut down and I don’t disable private accounts, which I administer with my MacBook.
That means, I am available all the time. However, whether I react to the notifications depends on the problem at hand.” (Interview 7)

Another employee states how she decided to get e-mails pushed at an interval of 30 minutes in order to be up to date with her notifications:

“Every half an hour I receive a notification. I assume half an hour is enough time, it doesn’t have to be adjusted to a minute-by-minute routine.” (Interview 3)

Different employees confirm that setting an automatic interval in order to get notifications about received e-mails is helpful to be all the time informed about work and private life domains happenings. It is also described as easier due to not to have to log in every time in order to be able to check for example their e-mails. An interviewee states below:

“I think that the email account is updated every 30 minutes. […] I would have adjusted the settings similarly, to avoid logging in every time. However, this setup allows the emails to refresh automatically and I would have a look at the new emails.” (Interview 4)

**Dynamic filtering.** Employees who want to be available only for important issues when they are at work or at home have the opportunity to filter their incoming messages dynamically. When applying dynamic filtering, only messages or phone calls from specific individuals are received in a set time frame. For example, one employee explained that he told his smartphone to only let through phone calls from his family when he is at work.

“I own an IPhone and it is equipped with the tool to only permit phone calls from people which I chose, at the times which I selected. For example, from 10 am until 8 pm, only my family can reach me and they only call when it is important. All other callers are blocked. Like that, I created my own free time.” (Interview 1)

When using this tactic, employees mainly separate work and private life. They only want to integrate work and private life when an intrusion from the other domain is important enough for themselves.

**Boundary App.** Technology can enable employees to manage their work life balance in helping them to focus on their currently active role. When employees are engaged in their work, technology prevents interruptions from family and private life. Similarly, when employees want to have private time, technology inhibits work related interruptions. Therefore, employees can integrate and separate to a certain degree to their own preferences. One employee illustrated this with a setting in his smartphone that enabled him to switch either to work or to private life:

“The new Blackberrys have a feature where you are able to separate work and your private information. That means, on one device you can switch between a work mode and a private mode. The private mode is used for private emails, WhatsApp, Facebook, etc. whereas work related emails can be checked using the work mode of the phone.” (Interview 14)

However, this technology might have both positive and negative effects. The advantage of a boundary app is that one can use the same device for multiple purposes without being interrupted from another life domain. Therefore, they can integrate their work and life at whatever time they like to but still keep this time free from interruptions because they separate. As a downside, at least in the context of our interviewee, there is the risk of invading users’ privacy:

“The advantage is that I only have one device. However, the downside is that I give my employer information about my private life.” (Interview 14)
5 CONCEPTUALIZATION OF INDIVIDUAL TACTICS

The maturity of technology use is an important aspect with regard to our research question, because it has a major influence on how individuals implement boundary tactics. Maturity in general has been addressed in various IS studies for instance as an overall technological maturity (e.g. Karimi, Gupta, & Sommer 1996) or on an individual level based on self-efficacy (e.g. Venkatesh, Morris, Davis, & Davis 2003). Since we focus on individual tactics, self-efficacy and individual maturity in terms of technology use is most relevant. Automatization of business processes can be understood as a high level of maturity, whereby manual processes can be considered as low maturity (Dumas, La Rosa, Mendling, & Reijers 2013). Based on this distinction we propose four different domains of individual boundary tactics which are summarized in the following table.

<table>
<thead>
<tr>
<th>Boundary Preference</th>
<th>Technological Maturity</th>
<th>Implementation Tactic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integration</td>
<td>High (automatic process)</td>
<td>Integration is integrated by automatic mechanisms (e.g. dynamic filtering)</td>
</tr>
<tr>
<td></td>
<td>Low (manual process)</td>
<td>Integration is conducted loosely through manual mechanism (e.g. manual procurement of information)</td>
</tr>
<tr>
<td>Separation</td>
<td>High (automatic process)</td>
<td>Separation is implemented by automatic mechanisms (e.g. automatic response notifications)</td>
</tr>
<tr>
<td></td>
<td>Low (manual process)</td>
<td>Separation is conducted manually (e.g. physical detachment)</td>
</tr>
</tbody>
</table>

Table 2: Four domains of individual boundary tactics

Our findings suggest that there are various approaches to comply with the individual tactic. Since automatization of IT is often on a continuum (ranging from manual to full-automation), a strict separation is of these tactics is rarely possible. For instance, the configuration of a communication filter (e.g. disable phone-calls after 8 pm) has both manual and automatic parts. In that case, we would argue that the core mechanism, namely the filtering, is mainly automatic. Conclusively, we propose a matrix including a continuum from integration to separation (Ashforth et al. 2000) and a continuum describing the technological implementation from manual to automatic. Building on this framework, the domain-affiliation of the different tactics are summarized in Table 2.

<table>
<thead>
<tr>
<th>Individual tactic</th>
<th>Primary objective</th>
<th>Examples for technological implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical detachment</td>
<td>separation</td>
<td>Leaving technology at work when at home; turning work-related technology off when at home or turning technology silent or on vibration.</td>
</tr>
<tr>
<td>Automatic response</td>
<td>separation</td>
<td>Using an answering machine; sending e-mail-notifications for e-mails that arrive after hours or on vacation.</td>
</tr>
<tr>
<td>Pull Information</td>
<td>mediation between integration and separation</td>
<td>Actively looking up new messages and phone calls without being informed just in time.</td>
</tr>
<tr>
<td>Boundary App</td>
<td></td>
<td>Possibility to change actively within the same technology between home and private life domains.</td>
</tr>
<tr>
<td>Push Information</td>
<td>integration</td>
<td>Being informed just in time about incoming messages and phone calls.</td>
</tr>
<tr>
<td>Dynamic Filtering</td>
<td></td>
<td>Setting up filters that let notifications of specific individuals come through.</td>
</tr>
</tbody>
</table>

Table 3: Overview of Individual Tactics

In summary, we identified six major IT tactics that allow individuals to maintain their boundary preferences. As they are located on a continuum (Ashforth et al. 2000), we recapitulate them in the following figure.
6 DISCUSSION

Summary. Information technology fundamentally influences all aspects of our life. It is therefore not surprising that IT enables a multitude of possibilities to implement and maintain individual tactics to meet one’s preferences. In order to answer our research questions, we identified six different individual tactics (physical detachment, automatic notification, pull information, boundary app, push information, and dynamic filtering) and systematically categorized them with regard to boundary preferences and technical implementation (see Figure 1).

Implications for theory. As our findings propose a more granular distinction of technology-related tactics, they enrich the findings of previous studies. By exploring individual boundary tactics, our research primarily contributes to boundary theory (Ashforth et al. 2000; Nippert-Eng 1996). In particular, our findings enrich the boundary tactics from Kreiner et al. (2009) by differentiating technology-related tactics. As such we added another continuum dimension besides integration and separation, namely technological implementation, to include technology-related aspects based on their automatization level.

We also contribute to the study of Duxbury et al. (2014) who describe the complex relationship between mobile technologies and individual boundaries. Their results show that developing a strategy to manage the use of mobile devices across work and private life domains is essential for reducing conflicts between work and private life domains. Our findings can be further used to analyse the relationship between mobile technologies and boundary preferences against the background of the identified technological tactics (see Figure 1).

Köffer et al. (2015) suggest that there are six aspects related to the consumerization of IT that influence work-life balance. They propose that the allowance or the permission of these aspects leads to work-life balance and conflict. With our findings, we further develop this idea by proposing a set of alternatives that can be used to improve individuals balance (for instance by offering a “boundary app”).

Figure 1: IT-related boundary tactics
Finally, we also contribute to Cecchinato et al. (2015) who put emphasize on micro-boundary strategies related to e-mail accounts. By extending our research beyond e-mail communication, we further identified technology related aspects that are relevant for individual boundary management. Specifically, the use of a mobile “app” that is used for a broad variety of scenarios (e-mail, phone, text message etc.) allows valuable insight into individual strategies, that can be used to further develop the device management as proposed by Cecchinato et al. (2015).

**Implications for practice.** Based on our findings, we can derive implications for practice regarding the autonomy and the knowledge of the employee as well as the possibilities of the organization to influence an employee’s boundary management. First, since individuals have different preferences in general and in terms of boundary management it is recommended that organizations try to offer enough freedom to implement them. Related to technology this can be done by offering chances to adapt and personalize technology.

Second, an individual’s knowledge on technology is a main aspect on implementing boundary preferences. Without sufficient capabilities to adapt technology, individuals are not able to meet their preferences. According to person-organization fit (Chatman 1989; French, Caplan, & Van Harrison 1982; Kristof 1996) organizations are encouraged to further train their employees on how to use (mobile) technology with a focus on individual adaptation.

Finally, organizations can easily influence an individual’s boundaries by setting defaults. For instance, when using a pull mechanism as default for e-mail communication, it is most likely that a great number of employees do not change to push (Thaler & Sunstein 2009). Therefore, the organization can facilitate separation between private and work life.

7  **LIMITATIONS AND OUTLOOK**

**Limitations.** Besides common limitations of qualitative research, this study has limitations that are worth mentioning. First, we asked the interviewees about general tactics related to IT. However, in specific scenarios, for instance employees using wearables or augmented reality technologies which can be even less separated in terms of boundaries than mobile technologies, there might be more tactics which we did not cover so far.

Furthermore, using the level of technology automation is only one possible dimension with regard to technology. Others could be mobility, complexity or ubiquity. Therefore, our findings are limited to only one specific dimension. However, our findings are well suited to transfer to other dimensions as well.

**Outlook.** As our study explored general tactics with regard to boundary management, our findings propose a sound foundation for future research. Especially with regard to design science, experimental research could further explain various effects by matching individual preferences and the design of IT artifacts. Furthermore, affective technologies can be included in order to be able to identify individual’s preferences.

8  **ACKNOWLEDGEMENTS**

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